Закарпатський угорський інститут ім. Ференца Ракоці II

Кафедра філології

Реєстраційний №_____

Кваліфікаційна робота

КОМП'ЮТЕРНА ДОПОМОГА В РОЗРОБЦІ ВИКЛАДАННЯ В КЛАСІ АНГЛІЙСЬКОЇ МОВИ ЯК ІНОЗЕМНОЇ
_____ **БЕРТА ЕРІКИ ГЕЙЗІВНИ** _____

Студентки _4__-го курсу

Освітня програма 014 Середня освіта (мова і література (англійська))
Ступінь вищої освіти: бакалавр

Тема затверджена Вченою радою ЗУІ

Протокол № /   2022 року

Науковий керівник: Гнатик Каталін Бейлівна
                                                         д-р філософії доцент

Завідувач кафедри: **Берегсасі Аніко Ференцівна**
                                                         д-р габілітований, доцент
                                                         професор кафедри філології

Робота захищена на оцінку _____, «___» _____ 2023_ року

Протокол № _____ / 2023_

Закарпатський угорський інститут ім. Ференца Ракоці II

Кафедра філології

Кваліфікаційна робота

КОМП'ЮТЕРНА ДОПОМОГА В РОЗРОБЦІ ВИКЛАДАННЯ В КЛАСІ АНГЛІЙСЬКОЇ МОВИ ЯК ІНОЗЕМНОЇ

Ступінь вищої освіти: бакалавр

Виконала: студентка _4___-го курсу

БЕРТА ЕРІКИ ГЕЙЗІВНИ

Освітня програма
014 Середня освіта (мова і література (англійська))

Науковий керівник: Гнатик Каталін Бейлівна
д-р філософії доцент

Рецензент: Густі Ілона Іштванівна,
доктор філософії, доцент

Берегове
2023

Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education
Department of Philology

CALL DEVELOPMENT IN EFL CLASSROOMS

Bachelor's Thesis

Presented by: Erika Berta

a 4th year student

Professional Education program:
014 Secondary education (language and literature (English))

Thesis supervisor: Katalin Hnatik
Candidate of Philological Sciences

Second reader: Ilona Huszti, PhD
Associate Professor

Beregszász – 2023

ЗМІСТ

CONTENTS

INTRODUCTION

Since the Internet has become the largest source of information in recent years, the younger generation is not unfamiliar with accessing websites and the Internet. There are now many computers in use across the world in nearly every location, including schools. This type of technological improvement and innovation opens up an entirely new field for studying other languages. These tools do not do the work themselves, as they cannot educate the pupils, but they assist teachers in developing innovative and creative approaches to learning and instruction. Concerning the difficulties of Computer-Assisted Language Learning (CALL is a method of presenting, reinforcing, and evaluating material to be acquired in foreign or second languages that uses computers, computer-based resources, and information technology) development and classroom technology, a significant quantity of scholarly work has been written.

Prior to conducting a comprehensive study on the topic, it is necessary to evaluate the relevant literature. There are a large number of publications and studies available to the scholar. Many scholars handled the subject in a variety of ways. Ken Beatty (2010) made a significant contribution to the field of e-learning with his extensive exploration of Computer-Assisted Language Learning (CALL). In her research, Christina Williams (2002) also explored pedagogy in connection to the design of online learning and courses.

Computer-Assisted Language Learning in English as a Foreign Language classrooms is the *subject* of this study.

The *object* of the study is to examine the concept of Computer Assisted Language Learning and related topics, as well as to study the opinions of Transcarpathian students about the Computer-Assisted Language Learning and teaching created due to the military state and COVID-19, their positive and negative aspects and effects.

The *theme* of the study is the advantages and downsides of computer-assisted language learning.

The *purpose* of this study is to research the factors that impact EFL educators' use of computers in the classroom, as well as to determine EFL instructors' attitudes on computer-assisted language learning (CALL) and how to enhance CALL practice in school settings during online education.

The thesis has the following responsibilities:

- Evaluation of the pertinent scholarly literature;

- Providing an explanation of the study's theoretical and conceptual foundation;

- Define e-learning and explain the fundamental ideas of foreign language learning.

- Outline and explain the questionnaire and its findings about the perceptions of Transcarpathian pupils towards Computer-Assisted Language Learning and Teaching during online instruction.

The *theoretical significance* of the thesis is to collect the tools for learning foreign languages via CALL, as well as determining students' perspectives on the merits and drawbacks of these methods.

The current thesis comprises an Introduction, Parts 1, 2, and 3, and a Conclusion. Computer-Assisted Language Learning is reviewed in the first section to establish a theoretical and conceptual foundation for the study. The second section discusses the theoretical foundation of EFL classrooms and the effects of technology on pupil. The third section provides a thorough overview of the research subject and findings. The conclusion contains the acquired results and a concise review of the subject.

PART 1

THEORETICAL CONCEPTS OF CALL DEVELOPMENT

Computers and their functions are discussed in the first part. Computer-Assisted Language Learning, language learning processes and methods are also included. The significance of the Internet and CALL development in classrooms are discussed in the first section of the thesis.

1.1 What is a computer and its functions?

Recently, computers have become an indispensable tool, particularly in the fields of data storage and information distribution. Because of the widespread use of computers, it has been trendy for businesses to be computerised, which entails establishing a computer department to service the entire organization and employing specialists or professionals to monitor and manage the department (Zakari, 2019: 2). Computers are electronic devices that are used to store, retrieve, and alter data, as defined by Zakari (2019). A computer is also described as an electromechanical programmable device that takes instructions (program) to guide its functions.

Denning (1997) argues that despite the fact that computer science is concerned with both human-made and natural information processes, the field has mostly focused on human-made processes, especially information processing systems and machines. Prior to the mid-1980s, the majority of work in these domains centered on computers as number-crunchers, symbol-manipulators, and data processors; with the advent of the Internet, the focus has expanded to encompass coordination and communication. According to Denning (1997), theoreticians in fast expanding technological fields such as databases, human interfaces, and Web-based systems use conceptual frameworks, taxonomies, and analytic techniques to organize the rapidly collecting mass of experience. In all fields of science, engineering, business, and the arts, the use of computers and applications is becoming more extensive and sophisticated. The ability to use a computer will unquestionably be necessary in the future as a result of technology advancement and globalization. He also asserts that the objective of computer development is to facilitate daily living. It is to remove the obstacles that humanity must overcome and to solve all the daily issues (Kejawa, 2016:8-9).

According to Edwards (1999), computers seldom "create" social changes in the sense implied by the "impact" paradigm; rather, they typically present social systems with pressures and possibilities to which they must respond. Computers influence society via an

interactive social construction process. Once introduced, a computer system can serve to institutionalize and rigidify these representations by embodying them (Edwards, 1999:3).

1.2 Internet and its importance

The creation of a new infrastructure that has changed personal communication, education, manufacturing, and practically every other aspect of social life is the remarkable technical achievement of the recent times. Today, the direction of development that connects millions of workstations in remote regions of the world via high-speed networks is referred to as an information superhighway, thereby enabling the creation of new, high-quality services that transcend time and geographical constraints and boundaries. Internet is the "information superhighway". According to Lengyel (1998), the Internet is a global computer network that permits communication across thousands of computer networks on different platforms through use of a unified "network communication language" - the Internet Protocol. The Internet is the collection of computer networks that link and interact using the Internet Protocol (IP). The operators of these smaller or bigger computer networks are independent. She also says that the Internet is not a corporation nor a global authority, but rather a collection of network services managed by many service providers (Lengyel, 1998: 3-16).

People now have new avenues to engage with one another and communicate with the rest of the world due to the proliferation of social media platforms. After Facebook and MySpace were launched between 2004 and 2006, social networking grew widespread during those years. Facebook, for instance, has more than 500 million users and is continuing to expand, and around 85 percent of students use Facebook now (Achew & Larson, 2015:1-6). 60 % of Quitney's (2003) study is applicable to the 2020 scenario, in which education will be much different than it was previously. A substantial number of activities will change to personalised, just-in-time service, and there will be a transition to "hybrid" classes that mix parts of online learning with the elimination of campus lectures, according to the researcher. Graduation criteria will be drastically modified in response to the updated findings. According to Amin, despite the rising literature on the detrimental impacts of Internet use, the majority of scholars consider the Internet to be good and informative (2017). Nonetheless, worries about internet risks and effects are growing. However, it should not be assumed that the Internet is advantageous in all circumstances and may be utilized regardless of Internet-related regulations.

In a series of memos published in August 1962, J.C.R. Licklider of MIT described his "Galactic Network" notion as the first known explanation of the social interactions that may be allowed by networking. He envisioned a worldwide interconnected network of computers via which all users could immediately access data and applications from any location. The notion was conceptually comparable to the Internet of today. Beginning in October 1962, Licklider was the first director of the computer research program at DARPA (The Advanced Research Projects Agency (ARPA) changed its name to Defense Advanced Research Projects Agency (DARPA) in 1971, then back to ARPA in 1993, and back to DARPA in 1996). During his tenure at DARPA, he persuaded Ivan Sutherland, Bob Taylor, and MIT researcher Lawrence G. Roberts of the significance of this networking notion. (Barry M. Leiner, Vinton G. Cerf, David D. Clark, et. al., 1997)

In July of 1961, Leonard Kleinrock at MIT released the first work on packet switching theory, followed by the first book on the subject in 1964. Kleinrock persuaded Roberts of the theoretical viability of communications using packets rather than circuits, which was a significant milestone on the road to computer networking. The second essential step was to enable communication amongst the computers. In 1965, Roberts, in collaboration with Thomas Merrill, created the first (however limited) wide-area computer network by connecting the TX-2 computer in Massachusetts to the Q-32 in California over a slow dial-up telephone line. As a consequence of this experiment, it was determined that the time-shared computers could function effectively together, executing programs and obtaining data as needed on the remote machine, but the circuit switched telephone system was completely insufficient for the task. Confirmation of Kleinrock's belief on the necessity of packet switching (L. Kleinrock, 1961).

Late in 1966, Roberts went to the Defense Advanced Research Projects Agency (DARPA) to explore the notion of a computer network. In 1967, he published his "ARPANET" design. Donald Davies and Roger Scantlebury of NPL also presented a packet network concept paper at the meeting where he presented his research. Scantlebury informed Roberts about the NPL's work as well as that of Paul Baran and other RAND employees. In 1964, the RAND group released a report on packet switching networks for the military's secure voice communications. It transpired that the study at MIT (1961-1967), RAND (1962-1965), and NPL (1964-1967) progressed concurrently without any of the researchers being aware of the other's work. The projected line speed to be utilized in the ARPANET design

was increased from 2.4 kbps to 50 kbps and the name "packet" was used from the work at the National Physical Laboratory (R. Kahn, 1972)

In August 1968, after Roberts and the DARPA-funded community had polished the ARPANET's overall structure and requirements, DARPA issued a request for proposals (RFP) for the construction of one of the network's core components, the Interface Message Processors (IMP). A team led by Frank Heart of Bolt Beranek and Newman won the RFP in December 1968. (BBN). As the BBN team worked on the IMPs, with Bob Kahn playing a key role in the overall ARPANET architectural design, the network topology and economics were designed and optimized by Roberts in collaboration with Howard Frank and his team at Network Analysis Corporation, and the network measurement system was developed by Kleinrock's team at UCLA.

Due to Kleinrock's early discovery of packet switching theory and his emphasis on analysis, design, and measurement, UCLA's Network Measurement Center was chosen to be the first node on the ARPANET. In September of 1969, BBN deployed the first IMP at UCLA and linked the first host computer, bringing everything together. Doug Engelbart's "Augmentation of Human Intellect" project (which includes NLS, an early hypertext system) at the Stanford Research Institute (SRI) served as the second node. Elizabeth (Jake) Feinler oversaw the Network Information Center at SRI, which SRI assisted by doing tasks such as maintaining tables of host name to address mapping and an RFC directory. (L. Kleinrock, 1961)

The first host-to-host transmission was transmitted from Kleinrock's laboratory to SRI one month later, once SRI was linked to the ARPANET. UC Santa Barbara and the University of Utah have added two additional nodes. These final two nodes included application visualization projects, with Glen Culler and Burton Fried at UCSB investigating methods for display of mathematical functions using storage displays to address the problem of refresh over the internet, and Robert Taylor and Ivan Sutherland at Utah investigating methods for 3-D representations over the internet. Thus, by the end of 1969, four host computers were linked together to create the inaugural ARPANET, and the Internet was born. Even at this early point, it is important to highlight that the networking research included both work on the underlying network and work on how to use the network. This custom is still practiced today.

During the subsequent years, the number of computers connected to the ARPANET grew rapidly, and development continued on a fully working Host-to-Host protocol and other network software. In December 1970, the Network Working Group (NWG), directed by S. Crocker, completed the first ARPANET Host-to-Host protocol, known as the Network Control Protocol (NCP). As the ARPANET sites finished the implementation of NCP between 1971 and 1972, network users were finally able to start developing applications (L. Kleinrock, 1961).

At the International Computer Communication Conference in October 1972, Kahn staged a massive, highly successful presentation of the ARPANET (ICCC). This was the public's first demonstration of this new network technology. In 1972, electronic mail was also released as the first "hot" application. Motivated by the requirement of ARPANET engineers for a simple coordination mechanism, BBN's Ray Tomlinson penned the basic email message send and read software in March. In July, Roberts enhanced its usefulness by creating the first email utility application to list, selectively read, file, forward, and react to messages. Since then, email has become the most used network application by a significant margin. This was a precursor to the type of activity we now observe on the World Wide Web, especially the explosive rise of all types of "people-to-people" traffic (R. Kahn, 1972)

1.3 Language learning processes and strategies

Over the past two decades, there has been a discernible shift in the area of language acquisition and instruction, with a greater emphasis on learners and learning as opposed to instructors and instruction. The literature has a number of different definitions of learning methods since the term is still contentious and scientists have given it both broad and limited interpretations. Learning strategies are the particular ideas or behaviors that individuals utilize to help them absorb, remember, or retain new knowledge, as defined by O'Malley and Chamot (1990). "Language learning and language use strategies can be defined as those processes which are consciously selected by learners and which may result in action to enhance the learning or use of a second or foreign language, through the storage, retention, recall, and application of information about that language," writes Cohen (1998). In the early phases of handling a novel linguistic problem, "strategies are most typically intentional and goal-driven," as stated by Chamot (2005). A level of automaticity in the use of a learning approach is possible when it has been applied repeatedly.

According to Hismanoglu (2000), researchers in the field of foreign language acquisition have been interested with how learners process new information and the strategies they employ to comprehend, acquire, or retain it concurrently with this change in attention. In the 1960s, research on language learning techniques began. Cognitive psychology discoveries have inspired a substantial portion of research on language learning methodologies (William & Burden, 1997, p.149)

Rubin began his research by concentrating on effective learners' practices, asserting that once identified, these techniques might be made available to less successful pupils. Rubin (1975) categorized strategies in terms of the processes that directly or indirectly contribute to language acquisition. Researchers have discovered and defined the language learning techniques employed by language learners throughout the processing of new information and execution of tasks. Rubin differentiates between techniques that directly contribute to learning and those that indirectly contribute to learning. The majority of his work in the subject of strategies was groundbreaking. There are three types of learning processes that contribute directly or indirectly to language acquisition. These include learning tactics, communication techniques, and social techniques. There are two primary types of strategies that contribute directly to the development of the learner's language system: cognitive learning strategies and metacognitive learning strategies. Cognitive learning methods are the actions or procedures employed in learning or problem-solving that require direct analysis, transformation, or synthesis of learning information. Rubin identified six primary cognitive learning processes that directly contribute to language acquisition: Clarification / verification, uessingg / inductive inferencing, deductive reasoning, practice, memorization, and monitoring.

The "full range of strategies" for learning a new language may be broken down into three groups based on the kind or level of processing involved, as described by O'Malley et al. (1985): cognitive, metacognitive, and affective/social. Hsiao and Oxford (2002) suggested splitting the latter group into social and emotional strategies to improve the model's ability to explain observed phenomena. According to O'Malley and Chamot (1990), the final typology consists of the following four categories:

One definition of "cognitive strategies" is any method of processing information in the mind in order to learn, such as "listening to a recording," "imagining" something, "repeating" something, "grouping" something, "inferring" something, "translating"

something, ". Selective attention, advance organizers, focused attention, self-management, and self-evaluation are all examples of metacognitive methods that help students analyze, plan, monitor, and evaluate their own learning. Emotional regulation using affective methods including positive self-talk, positive reinforcement, and positive reinforcement for oneself, and fourth, cooperating with others and asking questions to get clarity are examples of social tactics for expanding one's possibilities to practice one's target language and receive feedback.

Utilizing metacognitive learning procedures, language acquisition is guided, controlled, or self-directed. Planning, establishing priorities, establishing goals, and self-management are among the actions involved. Communication techniques have a tenuous relationship with language acquisition since they emphasize the process of engaging in a conversation and conveying meaning or clarifying what the speaker means. When faced with a dilemma, such as when their communication aims surpass their communication means or when a co-speaker misunderstands them, speakers adopt communication tactics.

Learners participate in activities that allow them to be exposed to and practice their knowledge through the use of social methods. Although these strategies give exposure to the target language, they do not directly promote language acquisition, storage, retrieval, or usage (Rubin & Wenden, 1987, p.23-27)

1.4 What is Computer-Assisted Language Learning?

CALL, or Computer-Assisted Language Learning, originated in the 1960s. It began with the creation of Programmed Logic for Automated Teaching Operations, popularly known as PLATO, at the University of Illinois; it was the most polished early CALL learning program. Computer-Assisted Language Learning was utilized in schools in the United Kingdom, Europe, the United States, and Canada, among others. In their earliest beginnings, they did not provide audio or video. With the advent of multimedia software in the 1990s, however, computers were able to make sounds through the soundcard and had improved screen resolution. Web traffic emerged in the early 2000s, showing new facets of the Internet, such as sharing, connecting, and socializing via web-based communities and platforms such as wikis, blogs, social networks, and virtual worlds (Andersen, 2013).

As defined by Beatty, CALL is "the process through which a student utilizes a computer to improve his or her language." CALL has been and will continue to be a vast and dynamic field (Ken Beatty, 2010).

Warschauer identifies three phases of CALL: the behavioristic, communicative, and interactive phases. Behavioral CALL was the initial phase. The second phase began in the 1980s, when individuals began to reject the behaviorist approach and more opportunities were created for pupils to study languages in school using CALL. The emphasis was not on how the pupils worked on the computer, but rather on how they collaborated while using the computer. In the 1990s, instructors began to realize that the previous ways were not the most effective answers. In this last phase, students are given task-based, project-based, and content-based assignments and are required to use technology tools to become more engaged (Andersen,2013). Language teaching professionals who can establish a complimentary link between computer technology and proper pedagogical programs are required to maximize the potential of computers (King, 2003).

All the professors have different opinions on how pupils should study, but they all agree that students should collaborate rather than compete while utilizing computers. The emergence of the Internet was also a turning point; it enabled new opportunities and ways by connecting computers worldwide.

1.4.1 CALL development in classrooms

CALL is an acronym for Computer-Assisted Language Learning. Levy (1997) defines CALL as "the search for and study of computer applications in language teaching and learning." As a result of the fast development of information technology, computers are now widely utilized in several disciplines, including language training and learning. The use of computers in language learning and instruction has been the subject of considerable research. Both traditional language learning and CALL have advantages and disadvantages. CALL is influenced to some extent by traditional language teaching and learning approaches. Although there are several approaches for language teaching and learning, the objective remains the same: to improve learners' skills to the level of native speakers. The objective of CALL development is to improve language instruction, not to bring novelty to the language (Cameron, 1989).

The link between learning and teaching a language is reciprocal. Traditionally, it requires fixed places as well as vast quantities of paper and chalk. Traditional language teaching and learning is teacher-centered, rigid, and devoid of student agency. In classrooms with a big number of students, the black or white board and overhead projector keep teachers occupied. The Audiolingual method is optimal for teaching and learning speaking and listening, but cognitive code and communication are the primary objectives for reading and writing. Jiang suggests that things should be more flexible while constructing a CALL system (2008).

Student-computer communication is a relatively recent notion, according to Liu (2000). Students and computer programs do not exchange "language" in their interactions. Students must instead grasp a novel form of communication. The computers employ graphical display, aural effects, and animated characters to communicate. Students must learn how to connect with computers in order to choose the appropriate course of action. Additionally, the conversational actions vary. In a conventional classroom, the instructor sets a setting that encourages pupils to use language as frequently as feasible. Due to the lack of similarity between the typical classroom and real world, teachers must encourage pupils to utilize their imagination. Innovations in language teaching and learning technology, such as CALL, that offer challenges not just to traditional roles in the nature of materials and classroom structure, but also to the language curriculum as a whole, require an educational rationale (Leech & Candlin, 1986).

PART 2

THEORETICAL CONCEPTS OF EFL CLASSROOMS

The second section of the thesis discusses EFL classrooms, the influence of technology in EFL classrooms, the use of ICT gadgets in teaching and learning, online teaching in quarantine, and the implications of technology use on pupils.

2.1 What is English as a Foreign Language classroom?

According to the Oxford University Press, an EFL (English as a Foreign Language) classroom is located in a nation where English is not the primary language. The students have the same language and cultural background. It is likely that the instructor is the first native English speaker the students have ever encountered. There are few possibilities for students to utilize English outside of the classroom. Students have minimal exposure to the English-speaking culture, which is frequently concealed by media like as television and music.

It has been discovered that the use of instructional technology, especially ICT, in the English language classroom increases and optimizes students' language acquisition, as well as greatly motivates them to continue studying and stimulates their creativity and enthusiasm (Azmi, 2017). By making class content more diverse and accessible to almost every individual learner, technology in language learning can boost variety, increase the diversity of learning environments and opportunities, and improve the quality of the learning experience, thereby promoting greater participation and engagement among students (Pennington, 1996).

Students have access to a number of electronic tools, including interactive video, the Internet, email, and the World Wide Web, as a result of ICT integration in the classroom. These ICT technologies can aid learners in strengthening linguistic abilities, creating contact and engagement with other language users, and widening their perspectives on other cultural practices, values, and modern lives in English-speaking nations. It is believed that ICT-assisted EFL instruction increases classroom activity and interaction (Azmi, 2017).

Incorporating a number of psychosociological and linguistic factors into the work of motivating pupils in the language classroom (Dörnyei, 1998) makes it a tough endeavor. Students are more likely to have a happy disposition when computers are utilized in the classroom. They are more willing and driven to communicate with native speakers from

diverse countries. The utilization of ICT may produce a learning environment that retains and improves motivation (Warschauer, 1996).

Numerous research on the benefits of technology in EFL classrooms have determined that technology can enhance the efficacy of EFL activities. Students urged that their professors employ technology and various technical equipment to create a more effective learning environment. This has increased and sustained their interest and engagement in the learning process, as well as increased their participation (Ilter, 2009).

2.2 Effects of technology in EFL classrooms

Numerous elements have affected foreign language teaching techniques, methods, and strategies for decades. Foreign language acquisition is a challenging endeavor, and students require regular support and motivation throughout this period. Technology may have a positive effect on the attitudes of students during the teaching and learning process (Ilter, 2009).

Adiyaman (2002) distinguishes between one kind of technical equipment, such as radio, television, cassettes, CDs, and DVDs, and two forms of educational technological equipment, such as emails, computers, interactive radio and television shows, teleconferences, and internet conferencing. Utilizing technology in the classroom offers various advantages. Students may be extremely motivated if they have the opportunity to observe the actual world in the classroom.

According to Ellis, challenging tasks and activities stimulate language learners (1994). Language learners can quickly lose enthusiasm and drive; therefore, effective language teachers must be passionate and focused. The psychological and social growth of students can be supported by films, music, and other media.

Consequently, the use of technology and online/distance learning education in EFL classrooms may give an excellent chance to create and design engaging projects. Using actual resources that are publicly available on the Internet, language learners may compile intriguing information and report it in English, while simultaneously enhancing their reading and writing abilities.

Technology in EFL classrooms offers several benefits, including the ability to deliver easy, genuine, and practical exercises as well as creative tasks. Although technology cannot

replace a qualified teacher, it may be used to motivate students and enhance the learning environment. Teachers have a crucial role in ensuring that technology is used effectively in the classroom; they must design and structure courses around these tools. In EFL classes, students must first develop, install, and utilize the appropriate equipment (Teeler & Grey, 2000). It may be argued that technology also enables weak learners to exhibit their skills and creativity. Not only does technology give excellent realistic resources, but it also enables language learners to join in everyday dialogues and enhance their vocabularies. In Kang and Dennis' (1995) study on the Internet and computer-based classrooms, there are interactive vocabulary options for EFL students.

2.3 ICT devices in teaching and learning

Integration of Information, Communication, and Technology (ICT) will aid educators in meeting the global requirement to replace conventional teaching techniques with technology-based teaching and learning tools and facilities (Ghavifekr, 2015).

In the twenty-first century, "technology" has become an essential topic in many fields, including education. This is because technology has become the principal mechanism of knowledge transfer in the majority of nations. Integration of today's technologies has produced innovations that have profoundly altered the way people think, work, and live. Therefore, schools and other educational institutions tasked with educating students for life in a "knowledge society" must integrate ICT into their curricula (Grabe, 2007).

Information, Communication, and Technology (ICT) integration in education refers to the introduction of computer-based communication into regular classroom instruction. In addition to educating students for the modern digital world, teachers are considered as crucial participants in the use of ICT in their regular lessons. This is because ICT can provide dynamic and proactive teaching-learning settings (Arnseth & Hatlevik, 2012).

ICT may be applied in a number of ways to aid both students and instructors in acquiring subject matter knowledge. Educational films, stimulation, data storage, database use, mind-mapping, guided discovery, brainstorming, music, and the World Wide Web (www) are examples of how technology-based teaching and learning may make the learning experience more gratifying and meaningful (Finger & Trinidad, 2002).

Hermans, Toudeur, Van-Braak, and Valcke (2008) identify three primary stages for ICT to be highly valued and considered by teachers: integration, enhancement, and

complementarity. The integration approach entails applying appropriate ICT use in a subject area that includes complex concepts and skills in order to increase students' accomplishment and attainment. In addition, a review of the curriculum is necessary to ensure that only linked ICT resources and relevant software are installed in order to achieve the curriculum's primary aims and objectives. The technique for improvement involves employing ICT to provide a significant emphasis on the topic under discussion. Microsoft PowerPoint, for instance, may be utilized to present the issue in a way that stimulates discussion and the interchange of ideas and perspectives. When ICT is utilized to assist and support a student's learning, it is known as a complimentary technique. This strategy enables students to be more organized and productive by allowing them to take notes on the computer, submit their work via email before the due date, and search and obtain knowledge from a range of internet sources to finish the assigned task (Hermans et al., 2008).

2.4 Impacts of technology use on pupils

Pupils in the twenty-first century are more technologically advanced than those of prior eras. A lot of attention has been paid to the impact of technology on children's brains and their social, emotional, cognitive, and physical development as a result of its increased use. Much of this research, especially brain-related research, is in its infancy. Moreover, research typically uncovers only weak correlations between technology usage and child outcomes; whether technology is to blame for these outcomes is uncertain, and tiny impact sizes raise worries regarding the real-world consequences for children. Despite these concerns, legislators in a number of nations have developed often stringent guidelines for children's digital use (Gottschalk, 2019).

Some study discusses the possibility of a "Goldilocks effect" in relation to technology usage. This indicates that moderate engagement in online and digital activities may be beneficial for subjective mental well-being and adolescent connection, but excessive or inadequate participation may be detrimental (Przybylski & Weinstein, 2017). Thus, the desire to publish narrow models may overlook certain nuances in the expanding corpus of research. Instead of the actual quantity of exposure, "problematic" or "excessive" technology usage may be defined by whether it interferes with routine daily tasks and is difficult to regulate (Howard-Jones, 2011).

Setting arbitrary limits on total screen time may fail to take into consideration the intricacies of screen use in childhood and adolescence. In addition, the majority of the

research base on well-being and biological consequences is theoretical and experimental. Development in these fields is necessary and will be supported by an increase in longitudinal research, randomized controlled trials, and discoveries that can be reproduced with high sample sizes.

Concern has been made by legislators, parents, and the media on how youngsters engage with video games and their "addictive" character. There are allusions in the literature of dopaminergic or reward pathways (usually associated with drug addiction) being engaged in gaming (Kuss & Griffiths, 2012). While the majority of research in this topic has been conducted on adults, some studies have been conducted on children. One research, for instance, identified slight but significant differences in a brain area associated with decision-making. Kühn et al. (2011) found that regular gamers had more gray matter volume in this area, which was related with shorter deliberation durations compared to infrequent gamers. Some aspects of study on children's technology use are supported by substantial and consistent evidence. Others, on the other hand, are influencing policy and public opinion with nonsensical or infantile conclusions. At this stage, many unanswered questions for further study remain.

Home quarantine as a result of the COVID-19 pandemic has posed challenges for teachers throughout the world, necessitating both innovative education and teacher development. Given the continuous growth and extension of online learning and teaching by instructors, it is crucial to identify effective ways to foster creative teaching under such challenging conditions. Although research has acknowledged that informal learning (IL) in the workplace is increasingly demonstrating its potential value for human development, the relationship between IL and creativity has gotten comparatively little attention (Yu, Liu, Huang & Cao, 2021).

Innovative teaching by teachers is intimately connected to the growth of imaginative students, and motivating teachers to innovate is a crucial study issue within the field of educational innovations (Lin & Yu, 2001). In many nations, a growing number of regulations and government-funded programmes aimed at empowering educators encourage innovative teaching practices (Craft, 2003). Due to the complex and difficult transition between teacher learning and creativity, however, creating conditions that enable instructors to encourage innovation is a significant challenge. The COVID-19 pandemic provides a very pertinent context for examining these issues.

Home quarantine is the primary containment technique for the pandemic, which has altered the everyday lives of billions of people. The vast majority of work and study activities have been stopped or changed to online forms (Pellegrini et al., 2020). As a result, widespread and permanent online education is adopted. The OECD (Organization for Economic Collaboration and Development) and a number of nations have urged for novel education, ICT skills, and in-depth cooperation in order to address the critical issue of online practice (OECD, 2020). China's Ministry of Education, for instance, mandated that universities and colleges throughout the nation provide teachers with online teaching techniques and free, open teaching and learning materials across regions and disciplines (China's Ministry of Education, 2020).

Consequently, online informal learning and creative teaching communities have proliferated across the nation. Rather than setting stringent requirements for study hours, study subject, or study location, educational institutions should view instructors as autonomous actors who determine their own professional growth. Interventions that target teaching and ICT efficacy can contribute to the development of creative teaching. Facilitating the transformation between input and output through the establishment of teacher online communities, the provision of alternative opportunities for teachers' reflective exchange of teaching experience, and the introduction of sufficient novel and challenging teacher learning resources should be the focus of support for informal learning (Lueddeke, 2003).

3.1 What is distance education/learning?

Distance learning is poised to upend the existing model of education as the boundaries between near and far are increasingly muddled by the Internet. There are more possibilities than ever to learn everything you need to know, from AI-driven teaching algorithms to basic message boards.

Technology will eliminate the physical distance between professors and students while still being an essential component of every student's life. Numerous universities now use distance learning in their curriculum, and this trend is expected to continue.

Distance learning, or any type of remote education in which the student is not physically present during the class, is thriving because to the Internet's potential. There is an increase in flexible and cheap education alternatives with a range of course kinds to select

from. In reality, remote learning has a lot of advantages over traditional teaching methods. Learning at a distance can take several forms, each of which requires its own infrastructure and set of tools. E-learning, blended learning, and mobile learning are all terms that describe this concept (Ajayi et al., 2019). All of these methods have one thing in common: distant delivery (Means et al., 2010). The basic goal of remote delivery is to improve communication, so that students may share their knowledge and ideas at any time.

In addition, remote distribution can sustainably support traditional learning tools while also being compatible with various pedagogical approaches and prior learning technology. We do not have a detailed account of whether or not it enables communication and collaboration between the educator and the student, as well as among students (Ally & Prieto-Blazquez, Citation2014; Bansal & Dhananjay, 2014). This type of interaction takes learning beyond the walls of the university and removes some of the restrictions imposed on learning, such as distance and space. The ability to communicate and work together effectively is crucial not only in the classroom but also in the workplace.

The main difference is that most of the early contacts between teachers and students throughout the history of distance education were asynchronous. The proliferation of Internet-based tools, from instant messaging to videoconferencing, has greatly increased the availability of synchronous work opportunities. In addition, asynchronous content sharing shifted heavily to online spaces and media (Virtič et al., 2021).

Compared to traditional classroom settings, distance education requires a new approach to both teaching and learning. In remote learning, teachers could not even have face-to-face interactions with their students during live broadcasts but instead just observe their conversations (Bozkurt and Sharma, 2020). Some examples of technical aids for distant learning include audio podcasts, videos, various simulators, and quizzes. However, the essential feature of remote learning is precise tracking of a student's performance, which aids in the creation of an individual path. Distance learning uses a computer game structure, with access to subsequent levels granted only once prerequisites have been satisfied, whereas online education aspires to simulate traditional classroom instruction (Bakhov et al., 2021).

Online learning systems are web-based applications used to distribute, monitor, and manage online courses (Keis et al.2017). Technology is used to guide, develop, and deliver lessons, and to open lines of contact between teachers and their students. Whiteboards, chat rooms, surveys, quizzes, discussion forums, and surveys are just some of the tools that

facilitate online collaboration between teachers and students (Thanji & Vasantha,2016). Effective and hassle-free means of accomplishing educational objectives may be provided through these. Microsoft Teams, Google Meet, Edmodo, and Moodle are all used as video conferencing and learning management systems at Pakistani educational institutions. Zoom, Skype for business, WebEx, Adobe Connect, etc., are also widely used alternatives for online meetings (Barbera &. Clara, 2012). The benefit of flexibility in online courses cannot be overstated due to its prevalence in reasons why students are attracted to online learning. Online learning allows for students to work at a time and a place that is compatible with their learning needs. A number of instructors and students commented on their ability to focus more of their attention on the content of the course and less on issues such as parking, traffic, and other problems that may arise when attending a traditional class environment (Thomson, 2010). One secondary teacher explained, "I don't miss the huge vistas of wasted time that inevitably become a reality in a face-to-face school context" and further explaining that "No schedule restricts us... We meet and stay as long as needed in the virtual space" (Thomson, 2010, p. 36).

A poll was conducted of the most important benefits that distance education brings to students who choose to employ this approach to achieve their educational goals. Many students who might otherwise enroll in traditional classroom courses choose for e - learning because of the greater freedom it affords them in terms of time, location, and other factors. The distance mode's adaptability in this regard is a major plus; Availability of materials: most on-site programs meet just once, so students who want to retain what they learn will need to take notes or find another way to record lectures. However, with distance education courses, students can examine the material anytime they choose (since it is often recorded on video and audio). In comparison to the expense of attending classes in a physical location, online education has several advantages, including: low cost. Many of the target audience's students are already working and want to upgrade their skills through distance learning courses since they allow them to study whenever it is convenient for them. Students may also benefit from online learning because there are less constraints on their study schedules and locations (Oliveira, M. M. S.; Penedo, A. S. T.; Pereira, V. S.,2018).

During and after a pandemic, all parties involved will face a wide range of complex issues. Problems with online instruction and retooling lessons are a reality for K-12 (U.S., Canadian, and other English-speaking nations use the acronym "K-12" to refer to the public school years that come before college, these grades are kindergarten (K) and first through

12th grade (1-12) and college educators who participate in large distant education. Educators nowadays are tasked with figuring out how to present themselves effectively in a digital setting, while also incorporating a variety of media into their lessons. As students spend more time outside of class reading and studying course materials (readings, videos, exercises, etc.), those resources have a greater impact on their learning (Rapanta et al., 2020). Furthermore, the quality of entirely online teaching and learning may be impacted by the usage of several online platforms or the concern of monopolies of specific platforms. Each platform facilitates unique kinds of communication amongst its users (Kennedy, 2020). Teachers at all levels from K-12 to higher education must be familiar with and proficient with the usage of already designed online tools, systems, or modules for enormous distance learning. Teachers can monitor their students' interest, boredom, irritation, success, and failure in the classroom with the use of modern technology (such automated analysis).

Distance learning has many benefits, but it also has several biases that are counterproductive to the educational process. A survey of several important ones was carried out, and they are as follows: students need self-control, for pupils who lack the self-discipline to complete assignments on their own without frequent instructor supervision, too much leeway might be seen as a disadvantage. Do not assume that the teacher will be available to answer questions right when they come up; while this is often the case in traditional classroom settings, it is less common in online learning environments, leading many students to hold off on asking questions until they can schedule a time to meet with their instructors in person (Oliveira, M. M. S.; Penedo, A. S. T.; Pereira, V. S.,2018).

Since computers and related devices are required for e-learning, students may feel physical discomfort due to prolonged computer use. Students have complained that the home-study program is more difficult than attending school full-time. Reasons given included things like the fact that having friends in class made it much more bearable and less stressful, even if normal classes themselves were difficult. Homeschooled children often feel that online courses are more demanding than those taken at a conventional school. Students believe that there is a learning curve associated with home-learning programs, despite their many benefits and suitability as a stand-in for traditional schooling during inclement weather (Ghoshal, 2020).

PART 3

SURVEY ON THE ATTITUDE OF TRANSCARPATHIAN STUDENTS ABOUT THE COMPUTER-ASSISTED LANGUAGE LEARNING AND TEACHING

The third part of the thesis gives information about students' attitude of Computer-Assisted Language Learning and Teaching during online teaching with the help of a questionnaire.

Computerized education has long been used in several countries and many are learning through it. The wealth of information available on the Internet can help students progress in several areas. Nevertheless, at the time of the pandemic, it was very difficult to switch to fully online learning for both teachers and students. The military situation in Ukraine has once again demanded the conditions for online education after the pandemic. The actuality of the topic stems from the fact that little research has been done in this area on the views of students on online education.

The purpose of my research is to assess the attitude and opinion of students participating in high school and higher education regarding the online education that arose due to the war and the preceding COVID-19 pandemic. The questionnaire consisted of twenty-six questions. The target age group ranged from 8th grade high school students to final year university students. This age group already has a definite opinion and experience regarding Computer-Assisted Language Learning in online education.

A questionnaire is a type of research instrument that consists of a set of questions aimed at collecting relevant data from participants. These tools take the form of an interview, with the interviewer asking the respondent a series of questions both in writing and orally. Researchers are not required to be present throughout the administration of qualitative or quantitative questionnaires conducted online, over the phone, in written form, or in person. The collected data used in the thesis was collected by an online questionnaire. There might be a combination of open and closed questions in a questionnaire. When asked an open-ended question, responders can provide an answer in their own words, expanding or narrowing the scope of their response as they see fit. When asked a closed question, respondents are given a set of possible answers. The questionaire used in this thesis consist of both open-ended and closed questions (Saris, W. E. and Gallhofer, I. N., 2014). The data of seventy-two participants were collected from various settlements in Transcarpathia. The questionnaire was written in two languages, English and Hungarian.

In the first question, the groups were separated, here the respondents chose which age group they belong to. The research started from the 8th grade of high school up to the final year university students. 25 percent of the respondents are in the 8th grade, 15 percent are in the 9th grade, 15 percent are in the 10th grade, 25 percent are in the 11th grade, and 30 percent are students in higher education.
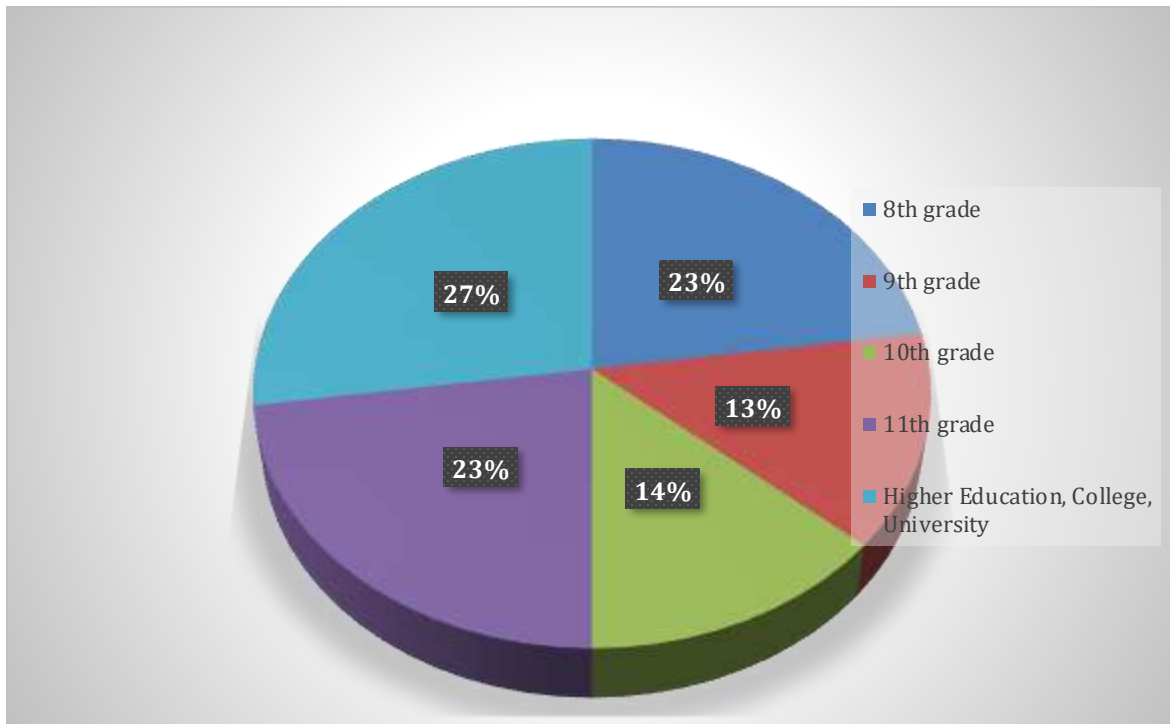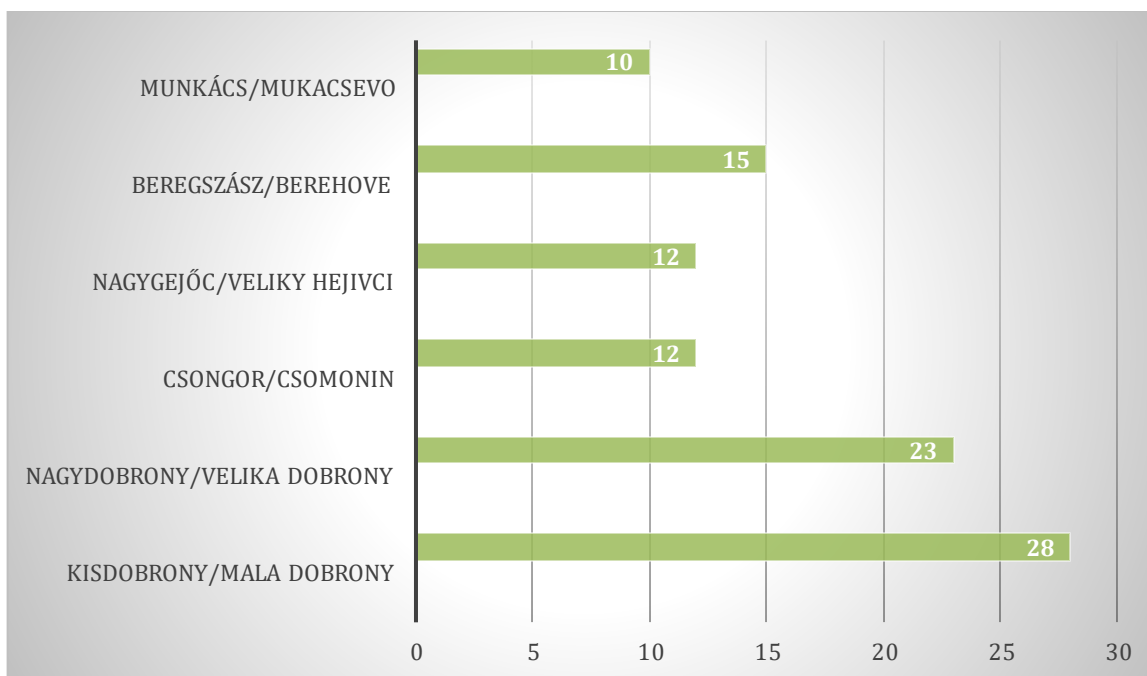

Figure 3.1 The perecentage of students' grade

The next question reveals whether more men or more women filled out the questionnaire. 72% of respondents are female, 28% are male.
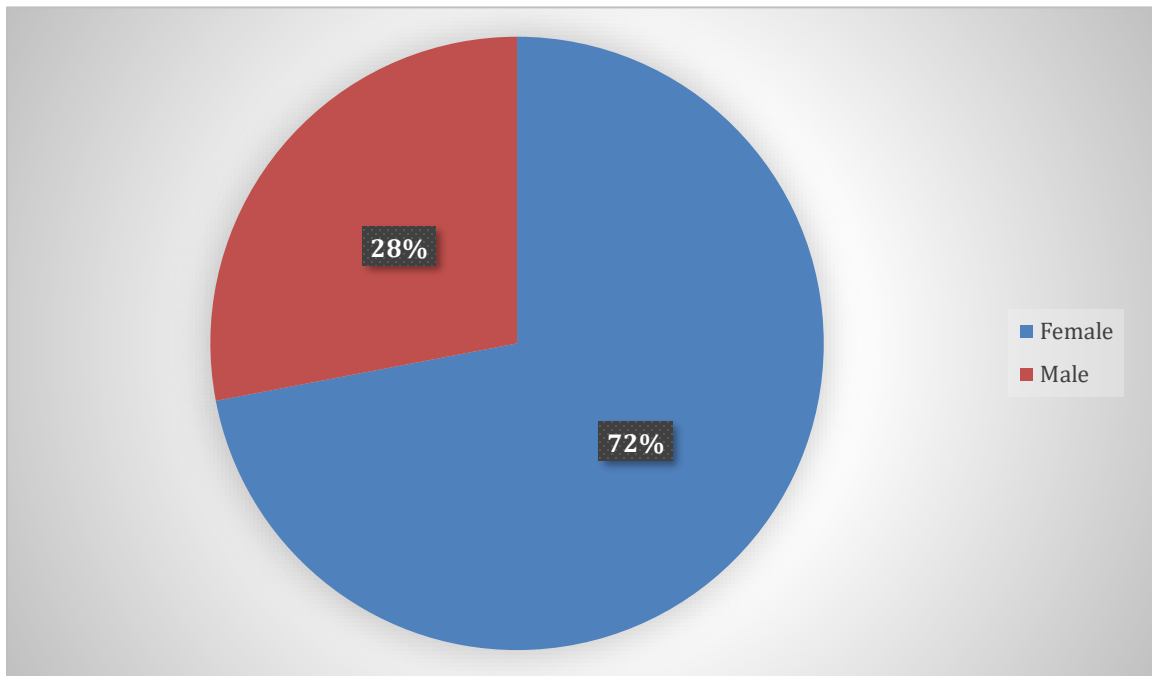
**Figure 3.2 The percentage of students' gender**

The respondents include residents from Kisdobrony/Mala Dobrony, Nagydobrony/Velika Dobrony, Csongor/Csomonin, Nagygejőc/Veliky Hejivci, Beregszász/Berehove and Munkács/Mukacsevo. 28% of the respondents live in Kisdobrony, 23% in Nagydobrony, 12% in Csongor, and another 12% claimed to live in Gejőc, 15% in Beregszász and 10% in Munkács.

Figure 3.3 The precentage of students' residence

The fourth question asks if the participant is currently learning or has studied English as a foreign language in the past. The answer to this question was 93% "Yes", and 7% of the respondents did not study English as a foreign language. This may be due to the fact that at Nagygejőci High School, students can choose between English and German as a foreign language.

The next question is related to online education, whether online education with the help of technology tools is more preferred than traditional classroom education. 13% of the participants prefer online education, with the help of computers and other aids. 46% of students prefer offline, classroom education without any technological devices. 41% of students think they prefer both equally.
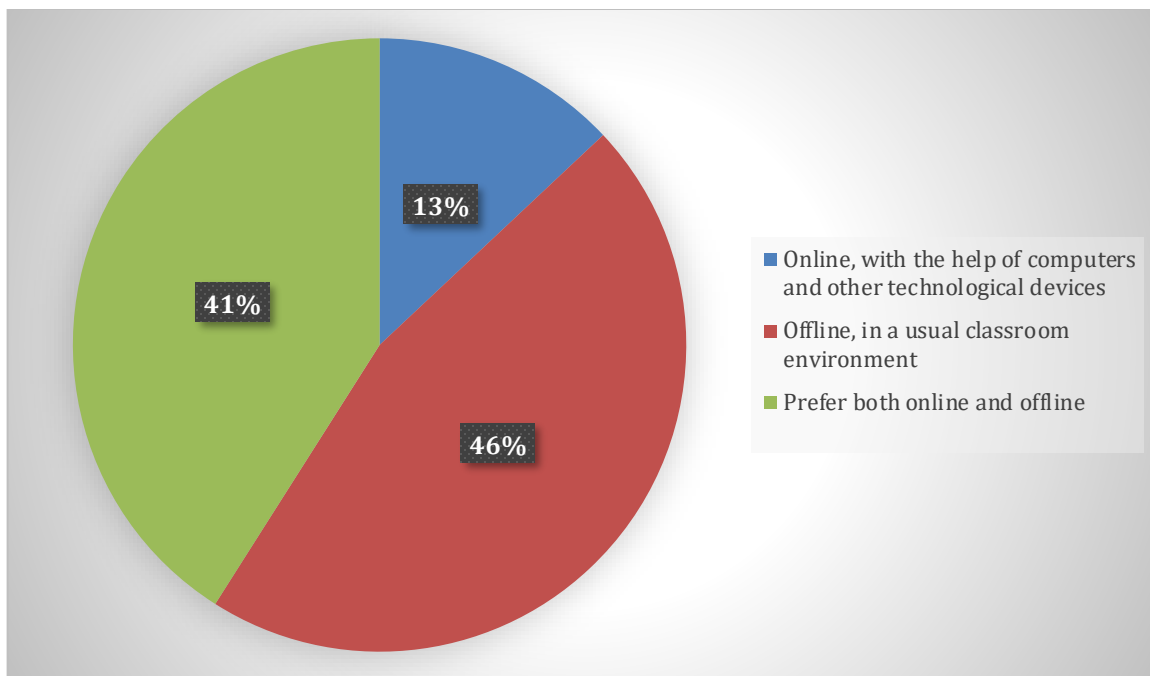
Figure 3.4 Percentage of preference for online education

The following is an open-ended question that asks for students' opinions on the positive aspects of online education. Several people stated that online education gives students more space in their private and student life and provides a more flexible deadline for completing homework. Some claimed that a positive aspect of online education is that they do not have to use public transportation on a daily basis and do not have to wake up as early in the morning, leaving more time for studying or for themselves. According to them, the students are less stressed, tired and sleepless. Another claim is that it is easier for them to work alongside their studies, both at home, in the field of housework, and in actual part-time work. In summary, the most common answers are flexibility, reduced costs, more free time, and enhanced time management skills. Asynchronous online learning's primary benefit is that it enables students to take part in high-quality learning situations even when time and distance make in-person learning challenging or impossible. If a student has access to a computer and the Internet, they can attend a class from any location. In addition, the online format allows physically challenged students (and teachers) more freedom to participate in class. Participants "attend" classes in the Virtual Classroom by using their computers at home.

The following question can be used to determine the negative aspects of online education from the students' point of view. Most of them have trouble understanding the topics and materials without personal teacher supervision and help. The social life of many

people has been pushed into the background, and distance from fellow students is also a problem in the online space. In addition, the deterioration of vision, frequent headaches from the bright light of the screen, and nausea are also a concern. Online education is a viable option for the independent, self-motivated student, but it is not a good fit for those who need more structure and guidance. Students in online asynchronous courses have more freedom to choose their own study hours, which can be helpful for those who are unable to attend classes during typical business hours. In order to keep up with the rigor of an online course, students need to be very organized, highly driven, and have excellent time management skills. Therefore, younger students (those in elementary or secondary school) and other students who are dependent learners and have trouble taking duties demanded by the online paradigm are not good candidates for online education.

From the following question, it can be determined what the students mostly use their electronic devices for on a daily basis. For this question, the respondents could select several items, since they use their electronic devices for several things every day. 64% of respondents use their electronic devices to communicate and maintain relationships with family and friends, 56% use them for entertainment and relaxation. 49% of them use it on a daily basis to study and solve problems, and 46% use it to watch educational Youtube videos and other films, cinemas and short films. The smartphone, first and foremost, is always at hand because it is always with the user. This facilitates quick access to educational materials at any time and from any place. This way, kids will not be concerned about being denied access to resources that can help them study more effectively. 26% of participants mostly play games on their electronic devices and 11% use them for work that they do from home or remotely. Typically, classes have been structured on the ideas and methods of the instructor. However, as classroom practices and technology have evolved, this original goal of education has been lost. By using techniques that are optimized for mobile devices, students may study whenever it is most convenient for them. In general, students now have more options while participating in classroom activities because to the prevalence of technological devices. Students' many senses are stimulated by the usage of technology in the classroom due to its many features and capabilities, all of which contribute to more effective teaching and learning techniques.
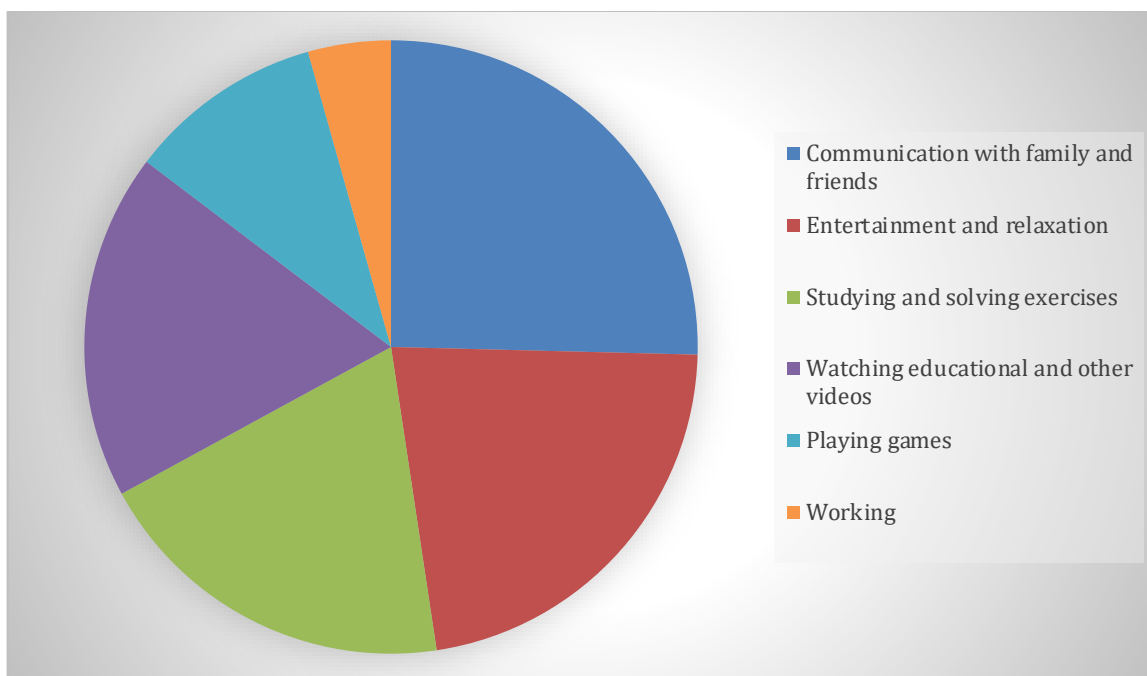
**Figure 3.5 Percentage of use of electronic devices for different aspects**

The next question examines how students relate to the use of ICT tools (Information and communication technology (ICT) tools are the collection of recently created technologies that provide more effective conveyance of information, so influencing how people gain access to information and interact with one another) in and out of the classroom. 34% of respondents prefer using ICT tools for learning. 6% of them do not like to use such tools at all, neither in class nor outside of class, and 60% use the tools, but prefer traditional classroom education. Teleworking and online classes were encouraged during the epidemic because regular attendance was impractical at times. At that point, ICT technologies were increasingly vital in the classroom. For the sake of the students' education and sanity among the commotion, the ability to continue working remotely has been crucial. These immediate technologies have allowed people to keep up their previous work pace by holding virtual courses, publishing deliverables to various educational platforms, and even completing tests with quizzes from the comfort of their own homes. Defining the requirements of the students and the curricular goals, as well as receiving training on how to use the tools provided by new technologies, are all prerequisites to successfully implementing ICT in the classroom. This is the only way to provide them with the adaptable classroom setting and instructional resources they need to reach their full potential. ICT tools include, but are not limited to, the following: visual materials, such as films, photos, or PDFs, that may be utilized to help students better grasp course material.
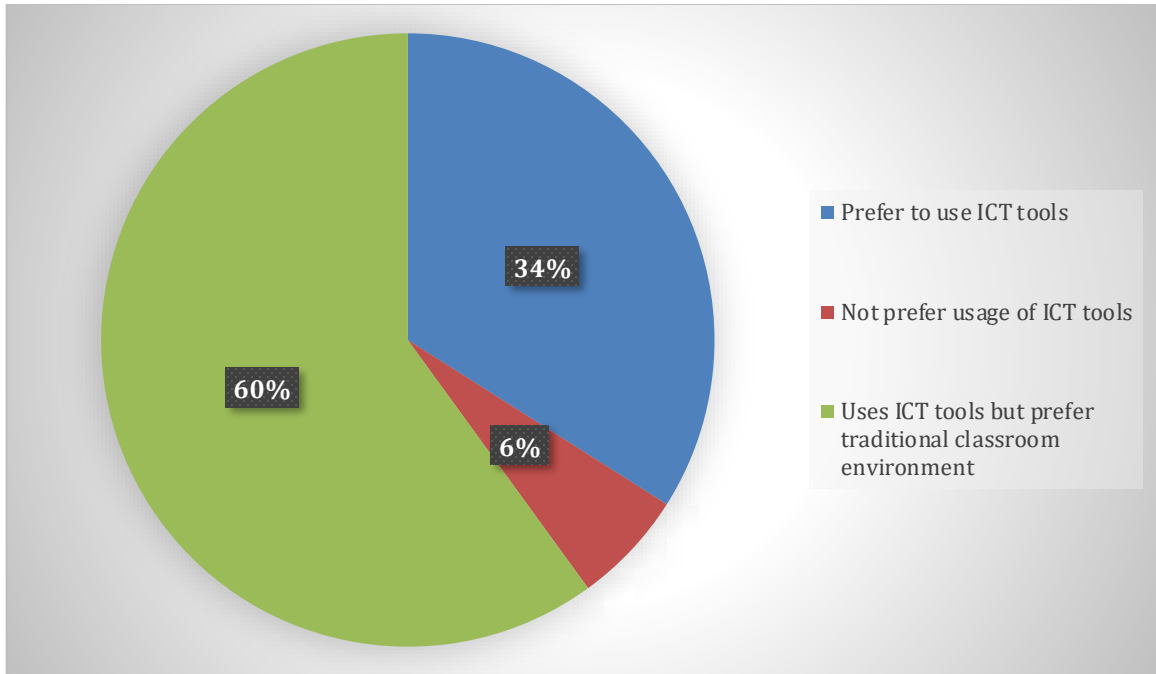
Figure 3.6 Percentage of prefferance of ICT devices

Regarding the use of ICT tools, as with all forms of learning, there are disadvantages. Respondents were able to choose more options. According to 45% of the respondents, it is more time-consuming to attend classes that require the use of such devices or are held online. According to 41% of them, it is difficult to use these devices on a daily basis, and this is considered a disadvantage. 17% claimed that they could not properly use their ICT tools in their studies. According to 11%, teachers also have difficulties using these tools, which makes it difficult to get in touch or have a productive lesson. Having a teacher and student engage face to face can help pupils not just memorize information, but also make sense of it, apply it, and find it intriguing. Teachers may do more for their students' sense of self and their students' emotional development if they spend more time interacting with them face to face. In low-income communities in particular, teachers may be a source of stability, and in all communities they can help lessen the prevalence of the troubling phenomenon of cyberbullying.
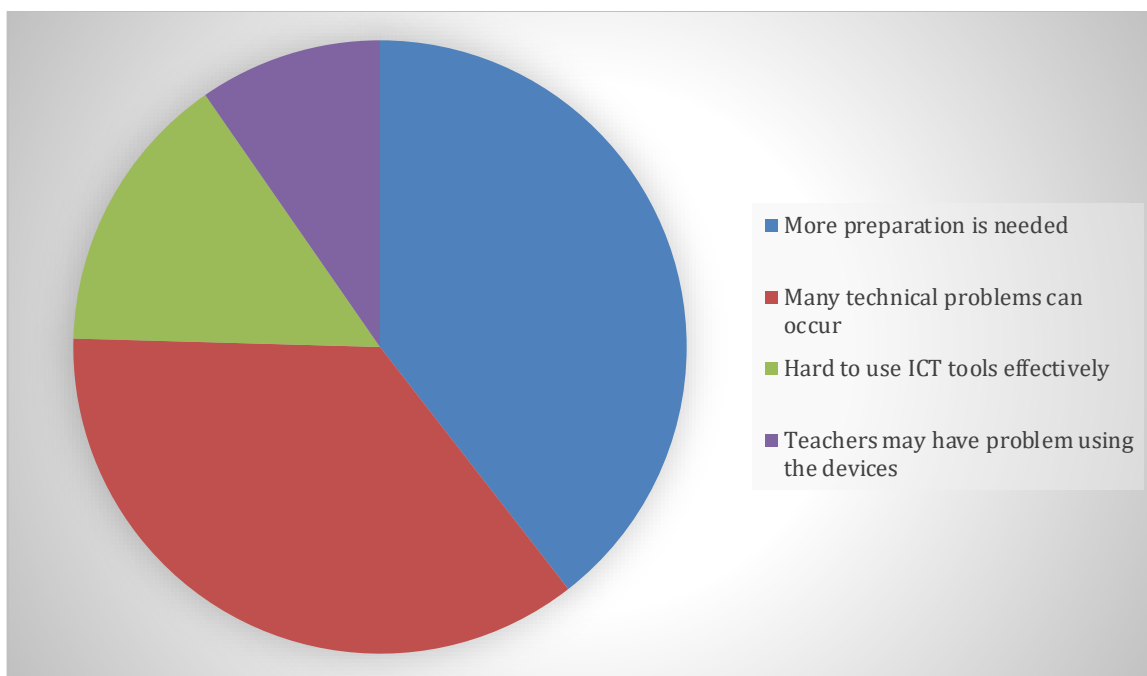
Figure 3.6 Percentage of disadvantages of ICT devices

In the case of online education, it is important that all students have access to ICT tools. Based on research conducted among Transcarpathian students, 41% of them believe that all students have the opportunity for Computer-Assisted Language Learning. According to 59% of them, not all students have access to the daily use of such devices, some cannot afford it financially or do not have full-day access. Regular power outages in Transcarpathia were also a problem. This is difficult for both teachers and students to cope with. Many pupils do not have access to a computer at home; this is especially true for younger pupils, those from low-income families, and recent immigrants. There are also occasions where students have access to computers, but they are either malfunctioning or too old to run the necessary software for their online courses. Or, pupils only have limited access to a computer since their parents need to utilize it for work. In still other households, there is a computer, but due to the presence of several children, it is not always accessible to each child.
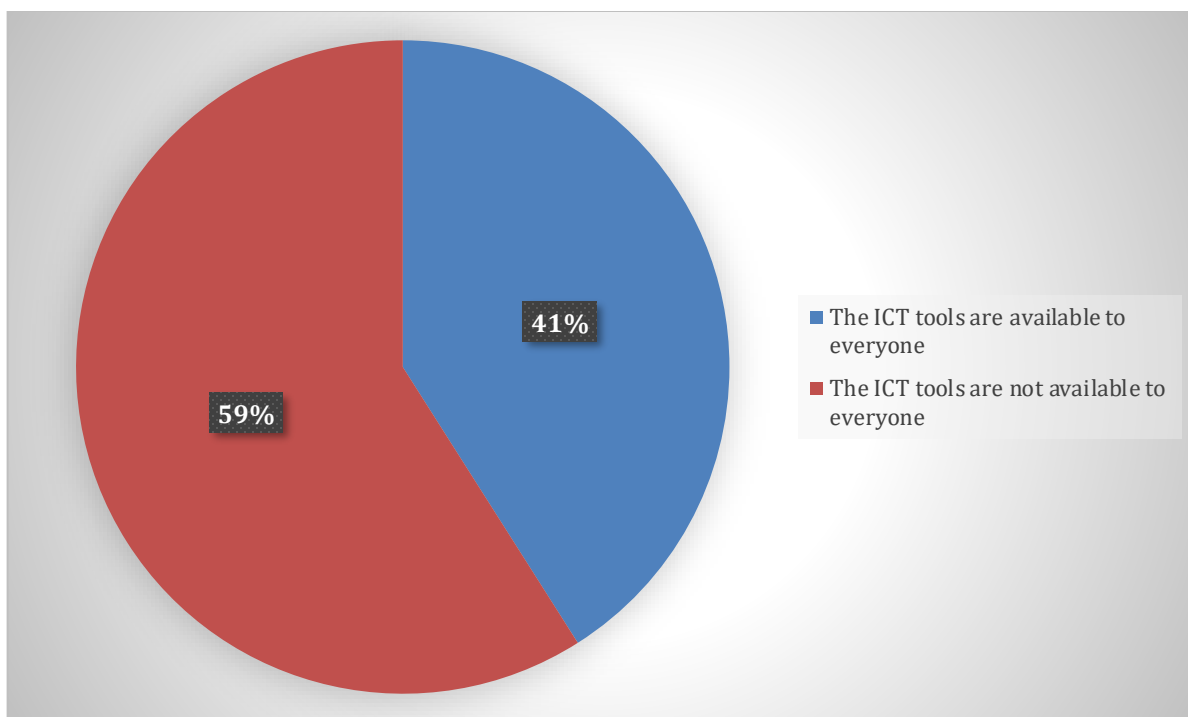
Figure 3.7 Percentage of availability of ICT devices

The next question was addressed to respondents who think that not all students have the opportunity to use ICT tools, which percentage of students do not have the opportunity to do so. 55% stated that the proportion of students who do not have the opportunity to use it is 10-20%. According to 25%, 20-30% of students do not have the opportunity to do so, and according to 20%, more than 30% of students cannot ensure the use of ICT devices on a daily basis.

The next question is related to the use of electronic devices, which devices are most useful for learning. Several answers could be selected for this question. 21% of the students find the computer useful, 61% the laptop, 7% the tablet, and 70% found the smartphone to be the most useful.

Computer provides pupils with immediate access to information beyond what is found in books. Young people nowadays are accustomed to using search engines like Google to find information. However, with the aid of computers, students will be able to approach research on any topic from a more rounded perspective.

Laptops make it easy for students to collaborate on projects by allowing them to meet in any setting (a library, classroom, or even a student's home) and provide instant access to

any and all relevant information (class notes, journal articles, internet research, video editing software, etc.).

While smartphones may be a source of distraction, they also have the potential to be used as a useful educational resource. There is no denying that cell phones improve the classroom environment. The fact is that students can add material to their phones considerably more quickly than they can write it down by hand. Especially in the secondary school level, teachers may act swiftly. Students who have permission may record the teacher or the class session on video or audio to take home and review if they are having trouble understanding a topic. Students can benefit greatly from using their smartphones' reminder and task capabilities to create and add to daily to-do lists. A paper planner is preferred by many students. However, homework/planner applications for smartphones make it much simpler to remember when assignments and projects are due. Students' constant access to their mobile devices streamlines the process of keeping track of everyday and impending commitments.
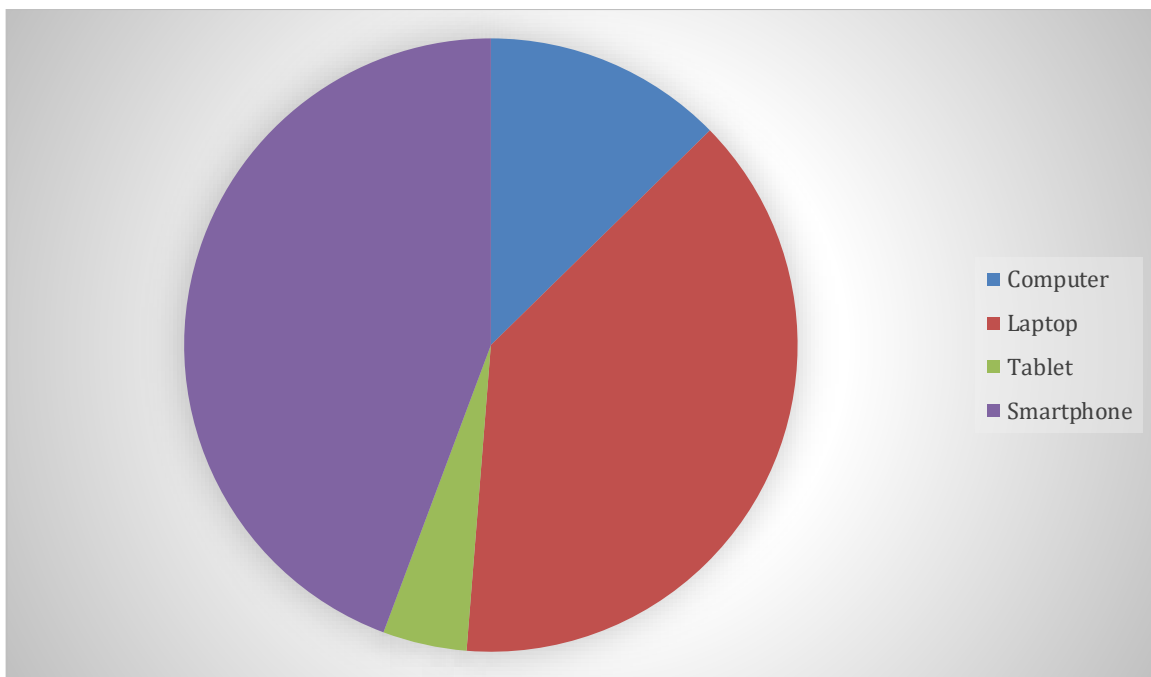
Figure 3.8 Percentage of preference of different electronic devices

The following question can be used to determine what percentage of respondents use ICT devices on a daily basis or less often. 5% of participants use the computer for learning on a daily basis, sometimes 13%, rarely 7% and never 10%. 17% use the laptop on a daily basis, 9% sometimes, 7% rarely and 4% never. 2% of students use tablets on a daily basis,

5% sometimes, 15% rarely, and 11% never use them for studying. There was a high level of agreement regarding the smartphone, with 47% of respondents using it daily and 35% sometimes.
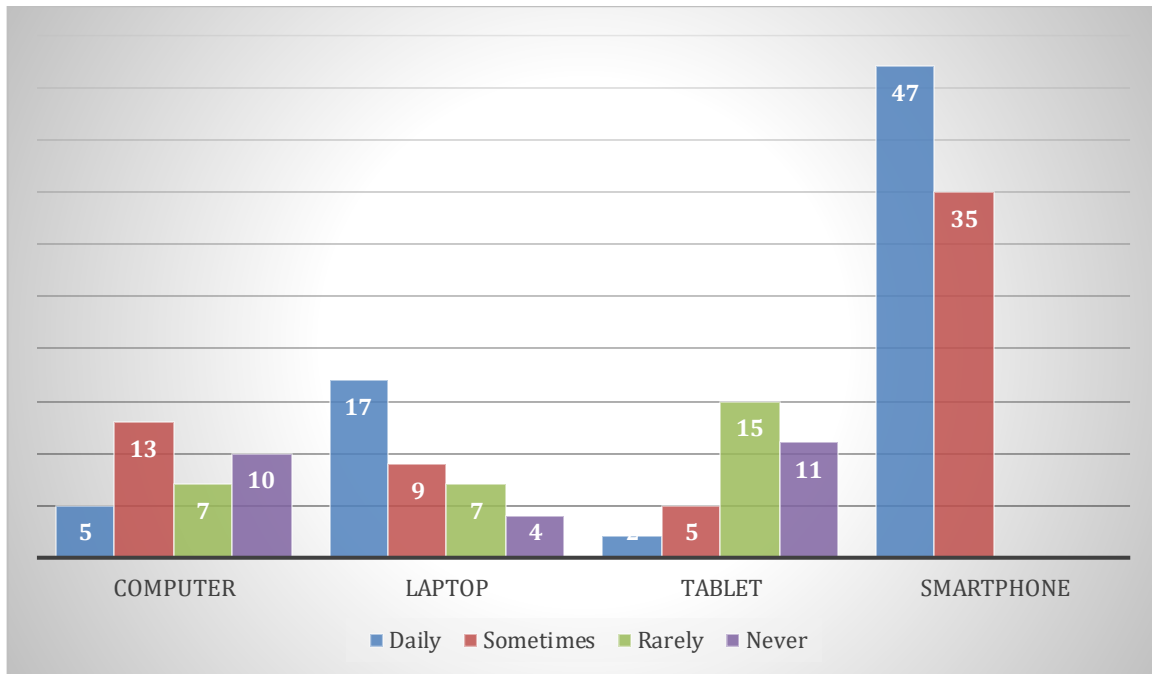
Figure 3.9 Percentage of preferred usage electronic devices

The next question was about the use of programs and websites, which are the programs that are used most often. From the data obtained, it can be concluded that the most used websites and programs among students are not websites that develop knowledge, but social media sites and apps. 77% of participants use TikTok, 90% use Messenger, 80% use YouTube, 64% use Instagram and 48% use Facebook daily. 48% of respondents use Email, 35% use Word, 33% use PowerPoint, and 10% use Excel. 3% of respondents even use Skype. Based on these data, it can be concluded that Messenger and YouTube are the most frequently used social media websites, and Word and Power Point are the most popular and most used of the learning programs.

TikTok was created in 2011 by Beijing-based business ByteDance as a social network for sharing short videos. Video editing software is used to create short dance, dubbing, comedy, and talent videos. In 2017, the app was released for iOS and Android devices in all regions except China.

Facebook's in-app private messaging service allows users to communicate with one another in privacy. This pertains to interactions between consumers and companies alike.

Facebook chat is used for desktop chatting, while Facebook's Messenger app is used for mobile messaging.

YouTube is a popular platform for sharing and viewing videos online. Personal videos may be made and uploaded for public viewing. YouTube has grown rapidly since its launch in 2005 to become one of the most visited websites worldwide, with users currently consuming over 6 billion hours of video every month.

Instagram is a free mobile app for iOS and Android that allows users to share photos and videos. The service allows users to post media to a public audience or a closed group of friends and family. Instagram also allows users to see, comment on, and "like" content posted by their friends.

Microsoft Word is a commercial word processor developed by Microsoft and used by millions of people every day. Microsoft Word may be purchased both as part of the bundled Microsoft Office package and separately. Since its introduction in 1983, Microsoft Word has undergone countless iterations of development and refinement. It works with both Microsoft Windows and Apple Mac OS X. Word and "MS Word" are common shorthand references to Microsoft Word.

PowerPoint's primary use was to facilitate the creation of graphics for use in corporate presentations; nevertheless, the program has now found widespread application in a broad variety of other contexts. This dramatically increased reliance on PowerPoint has been met with a broad range of responses, including suggestions that its use be reduced, altered, or improved.

Microsoft Excel is a spreadsheet application that may be found in the company's Office suite of products. Spreadsheet data may be formatted, organized, and calculated with the help of Microsoft Excel. Data analysts as well as other users can make information clearer to examine when data is added or modified by organizing data using tools like Excel. Cells, seen in abundance in Excel, are organized in rows and columns. These cells store information.

Skype is a piece of software that facilitates communication all over the globe. Skype is used by millions of people and companies every day to communicate with one another via video and audio conversations, instant chats, and file sharing. Skype is available across

several platforms, so you may use it on your phone, PC, or tablet as you see fit. Skype is a simple and cost-free method of communication.

Client software installed on a user's desktop, laptop, tablet, or mobile device to get messages from a server on the same network or another. It allows users to send and receive electronic mail as well as any attached files, thus the several names it goes by (email client, mail client, mail program, mail reader).
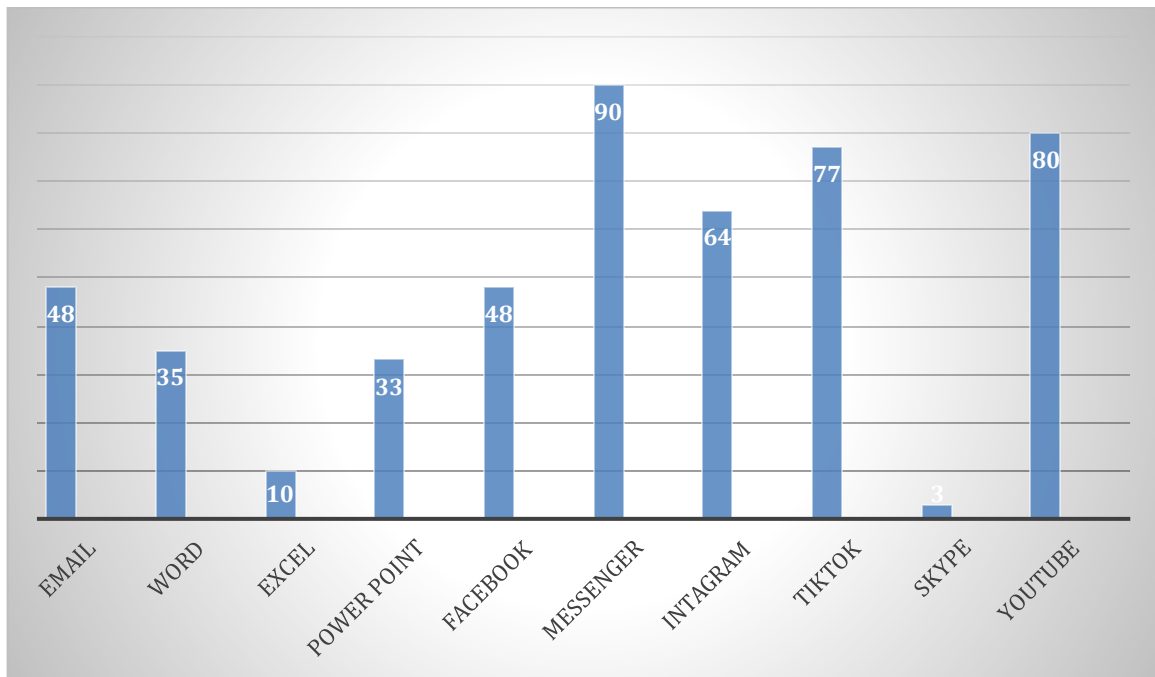
Figure 3.10 Percentage of usage Websites and Programs

In addition to websites and programs, the participants also selected which applications they use the most for learning. 79% of participants use Google Classroom and Meet, 36% use Kahoot!, and 34% use Zoom. These are the applications used by most participants. In addition to these, 31% use Zanza TV, 18% use Redmenta, 13% Sulinet Bázis, 10% Okos Doboz and 19% DuoLing. Only 5% use ClassIn.

With Google Meet's tight integration into Google Classroom, one can easily set up a separate connection for each of their classes. The link provides a streamlined method for both teachers and the students to join a class meeting.

Kahoot! is a platform for making, sharing, and playing educational games and pop quizzes in a matter of minutes.

Zoom is a videoconferencing and teleconferencing software that also supports voice and text chat. Zoom can only be used on computers or mobile devices that can connect to the internet. To begin using Zoom, most first-time users sign up for an account and install the Zoom Client for Meetings.

Redmenta is a web-based auto-grading worksheet that facilitates time and effort savings for educators and students alike while completing tests and homework.

Zanza TV is the most widely used online resource in Hungary to help high school students get ready for college.

The Sulinet Digitális Tudásbázis (abbreviated: SDT) is a content management framework (LCMS - learning content management system) available at no cost to members in the Hungarian education system. Its primary function is to house, manage, and distribute the country's extensive library of publicly available educational and occupational resources.

Duolingo is the most widely used tool for learning a new language. The company's stated goal is to create the premier educational platform and make it accessible to everybody.

ClassIn is an educational network created specifically for classroom use. Teachers may engage their students in novel and familiar ways with the help of interactive teaching technologies.
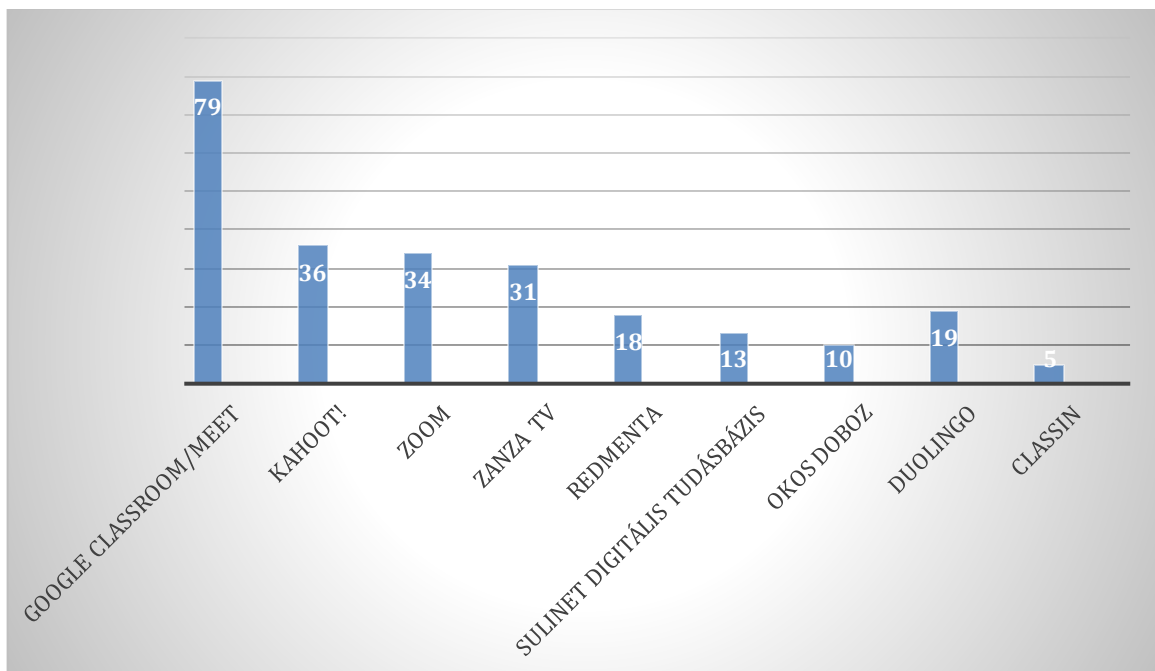
Figure 3.11 Percentage of usage Applications

The next question to the students is why they like to use these apps the most. The most common response was that it is easy to use, like Google Classroom. In addition, it facilitates learning without a tutor and helps to understand the subjects.

Based on the answers of the respondents, 95% of the students believe that it is easier to acquire skills in language learning than in offline classroom education. Such skills are, for example, speaking skills and reading or writing skills. Only 5% of them think that it is not easier to learn them with the help of Computer-Assisted Language Learning.

In the next question, we asked the participants which skills are more easily developed with Computer-Assisted Language Learning. 62% of students believe that listening comprehension skills are the easiest to develop, and 59% think reading skills are the easiest. The same 43% believed that writing and speaking skills can be developed well with the help of computer education.
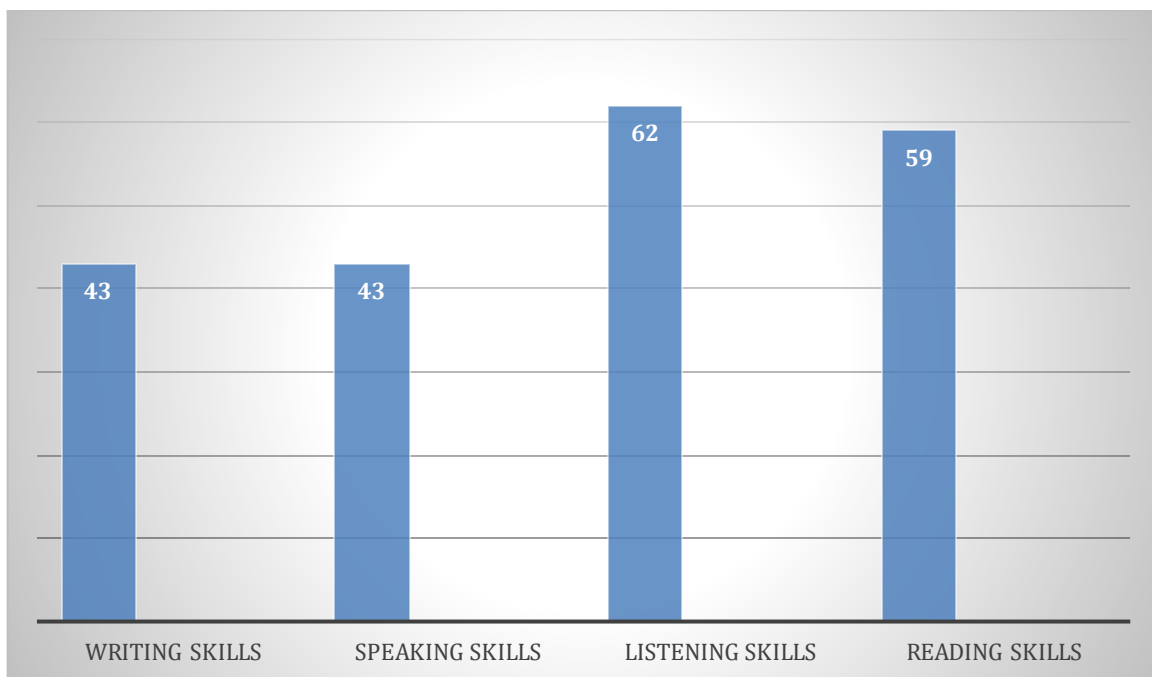
**Figure 3.12 Percentage of skill development**

The next question is how Computer-Assisted Language Learning affects students' independence. According to the majority of the students, such learning has a good effect on their independence, as they do not rely on the teacher, they find the information and prepare the task themselves. There were several answers to the effect that it is difficult to study

independently, attention is diverted and because of this it is difficult for many to progress in their studies.

Sometimes the hardest thing is to be motivated and stay motivated during our studies. If there is no motivation, there will be no progress. Maintaining motivation is a necessity. More than half of students believe that they are less motivated when it comes to studying alone, for example in the home environment. It is difficult to put aside other activities and sit down to study. A lack of motivation can also make it difficult for students to behave. According to the respondents, their attitude did not change during the online education, sometimes they learn the language online without noticing. The students mostly believe that their attitude towards Computer-Assisted Language Learning is positive, they can improve quickly in language learning and this has a motivating effect on them.

Results are also affected by these factors, but according to students, technology and smart devices have a positive effect on their academic results. Since the data is more easily accessible, you don't have to spend hours researching in libraries, saving time and researching more topics. According to this, computers and telephones help students achieve better academic results and new goals in language learning.

According to 11% of the respondents, they can improve in language learning since the start of online teaching, 31% think that they can't improve at all and 58% think that they might be improving, but they don't really notice it.
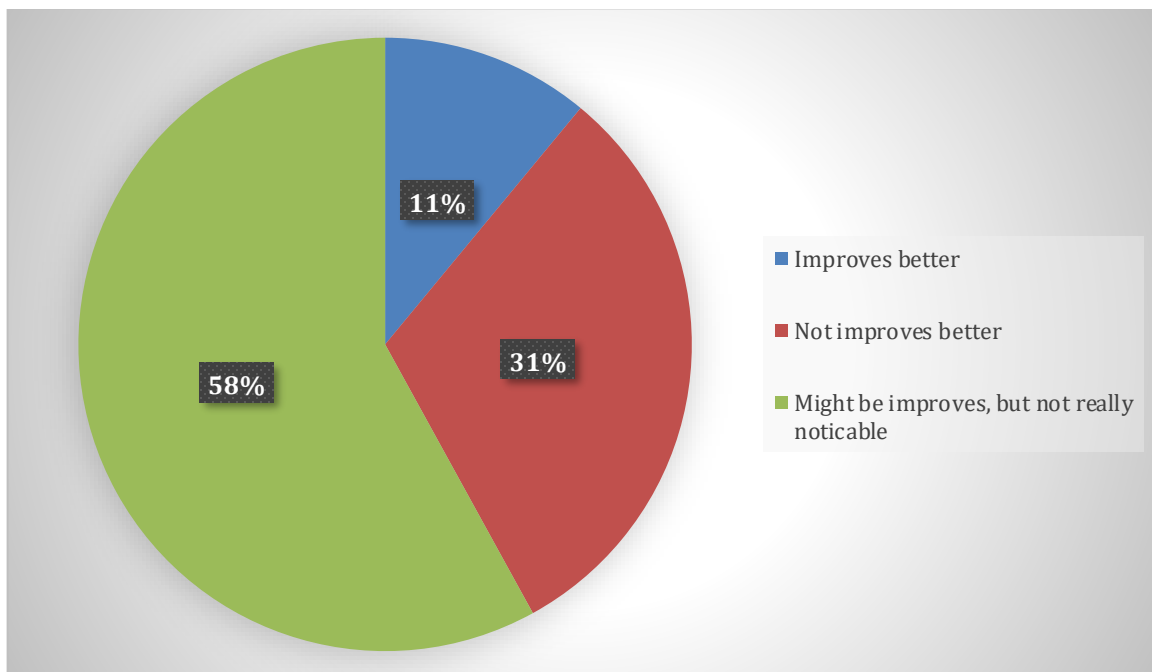
Figure 3.13 Percentage of language learning improvement

Although there are many benefits to learning online with others, students might sometimes encounter challenges. Time lags between encounters, ambiguous communication standards, a lack of visible aural discussion signals, and a perceived imbalance in dedication, responsibility, and effort between members of a working group are all potential obstacles to student learning and socializing in the online context. The lack of socialization and the lack of classmates can be observed. 76% of students miss their classmates and friends when teaching goes online. 13% sometimes miss, but are mostly not bothered by the lack of socialization and 11% do not miss traditional education and classmates at all.
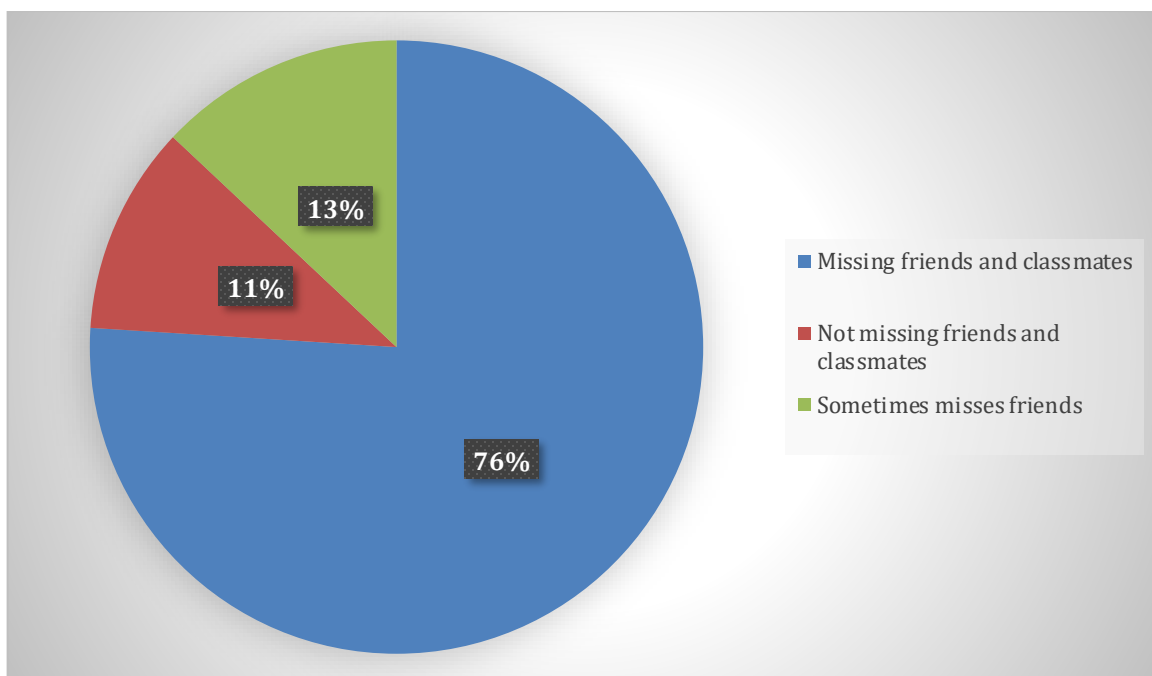
Figure 3.14 Percentage of lack of socialization

This is also true for teachers, students lack direct conversation and interaction with their teachers. The research shows that 53% of respondents miss direct communication with their teachers, 32% sometimes miss it, and 15% don't miss their teachers at all.
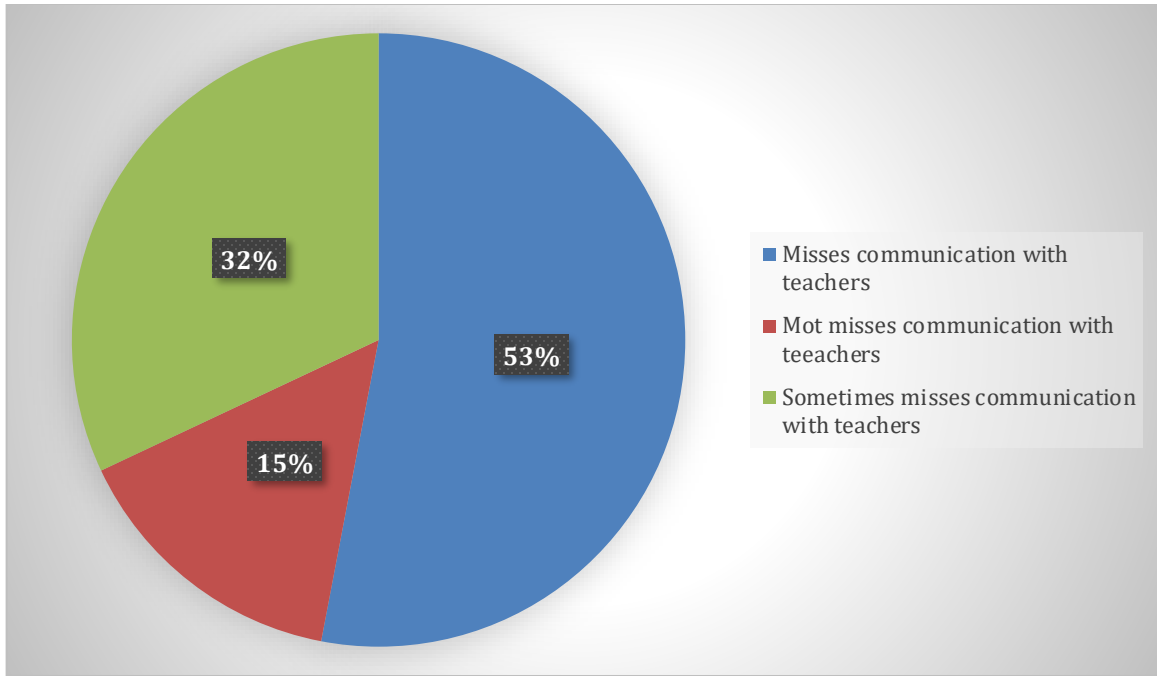
Figure 3.15 Percentage of lack of communication with educators

The last question is what is missing and what is not missing from traditional education. Most of the answers were about the lack of friends, the help of teachers, in addition, many people miss the community, social life, tangible books, physical education class and others. What students don't miss is stress and public transport every morning and afternoon.

CONCLUSION

Computers have recently become an important tool, particularly in the field of data storage and dissemination of information. The outstanding technical result of the recent period is the emergence of a new infrastructure that revolutionized personal communication, education, production, and almost every area of social life. Today, the direction of development, which connects many millions of workstations in remote parts of the world based on high-speed networks, thus creating new quality services overcoming time and geographical constraints and boundaries. Modern education has risen to a whole new level as a result of the online education required during the COVID-19 pandemic, which is ongoing in Ukraine till this day.

In the first part theoretical consepts of Computer-Assisted Language Learning, language learning processes and strategies and the importance of the Internet was discussed as well as CALL development in classrooms. Over the last two decades there has been a noticeable movement in the field of language learning and teaching, with a stronger emphasis on learners and learning rather than teachers and teaching. The abbreviation CALL stands for Computer-Assisted Language Learning. CALL is defined as the search for and study of applications of the computer in language teaching and learning. Computers are now widely employed in a variety of fields, including language instruction and learning, thanks to the rapid advancement of information technology.

In the second part theoretical consepts of EFL classrooms, effects of tehcnology and use of ICT devices were discussed. For ages, many variables have influenced foreign language teaching approaches, methods, and strategies. Learning a foreign language is a difficult task, and students need constant encouragement and inspiration during this time. Technology may be one of the things that has a beneficial impact on students' attitudes during the teaching/learning process. The use of instructional technology, particularly ICT, in the English language classroom has been found to increase and optimize students' language acquisition, as well as significantly motivate them to continue learning and stimulate their creativity and passion. Children in the twenty-first century are more tech-savvy than previous generations. Because of this increase in use, there has been a lot of focus on the effects of technology on children's brains and their socio-emotional, cognitive, and physical development. ICT can be utilized in a variety of ways to assist both students and teachers in learning about their subject areas. Educational movies, stimulation, data storage,

database use, mind-mapping, guided discovery, brainstorming, music, and the World Wide Web (www) are just some of the ways that technology-based teaching and learning can provide and make the learning experience more rewarding and relevant.

The third part gives detailed explanation of the purpose of the research and the findings. The purpose of the research is to assess the attitude and opinion of students participating in high school and higher education regarding the online education that arose due to the war and the preceding COVID-19 pandemic. The questionnaire consisted of twenty-six questions. The target age group ranged from 8th grade high school students to final year university students. This age group already has a definite opinion and experience regarding Computer-Assisted Language Learning in online education.

A questionnaire is a type of research instrument that consists of a set of questions aimed at collecting relevant data from participants. The questionaire used in this thesis consist of both open-ended and closed questions. The data of seventy-two participants were collected from various settlements in Transcarpathia. The questionnaire was written in two languages, English and Hungarian.

In the first question, the groups were separated, here the respondents chose which age group they belong to. The research started from the 8th grade of high school up to the final year university students. 25 percent of the respondents are in the 8th grade, 15 percent are in the 9th grade, 15 percent are in the 10th grade, 25 percent are in the 11th grade, and 30 percent are students in higher education. The respondents include residents from Kisdobrony/Mala Dobrony, Nagydobrony/Velika Dobrony, Csongor/Csomonin, Nagygejőc/Veliky Hejivci, Beregszász/Berehove and Munkács/Mukacsevo.

Questions were related to online education, whether online education with the help of technology tools is more preferred than traditional classroom education. 13% of the participants prefer online education, with the help of computers and other aids. 46% of students prefer offline, classroom education without any technological devices. 41% of students think they prefer both equally. 64% of respondents use their electronic devices to communicate and maintain relationships with family and friends, 56% use them for entertainment and relaxation. 49% of them use it on a daily basis to study and solve problems, and 46% use it to watch educational Youtube videos and other films, cinemas and short films. 26% of participants mostly play games on their electronic devices and 11% use them for work that they do from home or remotely.

From the data obtained, it can be concluded that the most used websites and programs among students are not websites that develop knowledge, but social media sites and apps. 77% of participants use TikTok, 90% use Messenger, 80% use YouTube, 64% use Instagram and 48% use Facebook daily. 48% of respondents use Email, 35% use Word, 33% use PowerPoint, and 10% use Excel. 3% of respondents even use Skype. Based on these data, it can be concluded that Messenger and YouTube are the most frequently used social media websites, and Word and Power Point are the most popular and most used of the learning programs. In addition to websites and programs, the participants also selected which applications they use the most for learning. 79% of participants use Google Classroom and Meet, 36% use Kahoot!, and 34% use Zoom. These are the applications used by most participants.

In summary, the thesis provides a detailed presentation of the positive and negative sides of Computer-Assisted Language Learning and the attitude of Transcarpathian students on the subject. Students are generally positive about online education and technological advances. The final say on whether computer assisted learning is appropriate for particular classes remains upon each individual instructor. The use of computers in the classroom may be an excellent method to make advantage of new technology and improve the language learning experience as long as the benefits and drawbacks are suitably balanced.

REFERENCE LIST

1. Achew, M. O. & Larson, A. G. (2015) *Use of Social Media and its Impact on Academic Performance of Tertiary Institution Students: A Study of Students of Koforidua Polytechnic.* Ghena Journal of Education and Practice 6. pp. 1-6.

2. Adiyaman, Z. (2002) *Foreign language teaching via distance education;* TOJET 1. Issue 1.

3. Ajayi, A., Ayo, C. K., Olamide, O., & Amoo, E. O. (2019*). Mobile learning and accounting students' readiness in tertiary and professional institutions in Nigeria.* Cogent Arts & Humanities, 6(1), 1–25. https://doi.org/10.1080/23311983.2019.1676570 [2023.01.09]

4. Ally, M., & Prieto-Blazquez, J. (2014). What is the future of mobile learning in education? *Revista De Universiday Sociedad Del Conocimiento*, 11(1), 142–151.

5. Amin, S. N. (2017) *Internet,users and Internet Non-users Attitude towards Research: A Comparative Study on Post-Graduate Students;* Journal of Education and Practice; Vol. 8. No.1;pp. 2-7.

6. Andersen, I (2013) *Mobile Apps for Learning English; A review of 7 Complete English Course Apps; Characteristics, Similarities and Differences.*

7. Arnseth, H. C. & Hatlevik, O. E. (2010) *Challenges in aligning pedagogical practices and pupil's competencies with the Information Society's demand: The case of Norway. In S. Mukerji & P. Triphati (Eds.), Cases on technological adaptability and translational learning: Issues and challenges.* Hershey: IGI global.

8. Azmi, N. (2017) *The Benefits of Using ICT in the EFL Classroom: From Perceived Utility to Potential Challenges;* Journal of Education and Social Research; Vol.7; No.1; pp. 111-117.

9. Bakhov, I., Opolska, N., Bogus, M., Anishchenko, V., and Biryukova, Y. (2021). *Emergency distance education in the conditions of COVID-19 pandemic: experience of Ukrainian universities.*

10. Bansal, D., & Dhananjay, J. T. (2014). A study of students' experiences of WhatsApp mobile learning. *Global Journal of Human-Social Science Research*, 14(4), 27–32.nc

11. Barbera E, Clara M. *Time in e-Learning Research:A Qualitative Review of the Empirical Consideration of Time in Research into e-learning.* ISRN Educ. 2012:2012. doi:10.5402/2012/640802 [2023.03.11]

12. Barry M. Leiner, Vinton G. Cerf, David D. Clark, Robert E. Kahn, Leonard Kleinrock, Daniel C. Lynch, Jon Postel, Larry G. Roberts, Stephen Wolff. (1997) *A Brief History of the Internet.* ACM SIGCOMM Computer Communication Review, Volume 39, Number 5, October 2009.

13. Beatty, K. (2010) *Teaching and Researching Computer-Assisted Language Learning.* 2nd ed. Harlow: Pearson/Longman.

14. Bell, K. (2011) *How ESL and EFL classrooms differ;* Oxford University Press: English Language Teaching Global Blog.

15. Bozkurt, A., and Sharma, R. (2020). *Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic.* Asian J. Distance Educ. 15:2020.

16. Cameron, K. (1989) *Computer-Assisted Language Learning;* Oxford; Oxford University.

17. Chamot, A.U. (2005*). Language learning strategy instruction: Current issues and research.* Annual Review of Applied Linguistics, 25: 112-130.

18. Chamot, A.U. and J.M. O'Malley (1987). *The cognitive academic language learningapproach: A bridge to the mainstream.* TESOL Quarterly, 21 (3): 227-249.

19. China's Ministry of Education (2020) *InformationAbout Online Education in Colleges and Universities and Consideration of the Next Work.*

20. Cohen, A.D. (1998*). Strategies in learning and using a second language.* Harlow:Longman

21. Craft, A. (2003) *The limits to creativity in education: dilemmas for the educator.* Br. J.Educ.Stud. 51; pp. 113-127.

22. Denning, P. J (1997) *Computer Science: The Discipline.* Encyclopedia of Computer Science (A. Ralston & D. Hemmendinger, Eds.); pp. 2-25.

23. Dörnyei, Z. & Ottó, I. (1998) *Motivation in Action: A process model of L2 motivation.* Working Papers in Applied Linguistics.

24. Edwards, P. N. (1999) *From Impact to Social Process: Computers in Society and Culture.* Handbook of Science and Technology Studies; pp. 3-32.

25. Ellis, R. (1994) *The study of second language acquisition.* Oxford, Oxford University Press.

26. Finger, G. & Trinidad, S. (2002) *ICTs for learning: An overview of systematic initiatives in the Australian states and territories.* Australian Education Computing, 17 (2); pp. 3-14.

27. Ghavifekr, S. & Rosoly, W. A. W. (2015) *Teaching and learning with technology: Effectiveness of ICT integration in schools.* International Journal of Research in Education and Science (IJRES), 1(2); pp. 175-191.

28. Ghoshal DB. (2020). *Advantages and disadvantages of online teaching learning during pandemic.* International Journal of Creative Research Thoughts (IJCRT), vol. 88, no. 983.

29. Gottschalk, F. (2019) *Impacts of Technology Use on Children: Exploring Literature on the Brain, Cognition and Well-being; Directorate for Education and Skills; Organization for Economic Co-operation and Development.* OECD Education Working Paper No.195; EDU/WKP (2019)3.

30. Grabe, M. & Grabe, C. (2007) *Integrating technology for meaningful learning* (5th ed.) Boston, MA: Houghton Mifflin.

31. Hermans, R., Tondeur, J., Van-Braak, J. & Valcke, M. (2008) *The impact of primary schools teachers' educational beliefs on the classroom use of computers.* Computer & Education, 51(4); pp. 1499-1509.

32. Hismanoglu, M. (2000) *Language Learning Strategies in Foreign Language Learning and Teaching;* The Internet TESL Journal, Vol.VI. No.8.

33. Howard-Jones, P. (2011) *The impact of digital technologies on human wellbeing: Evidence from the sciences of mind and brain.* Nominet Trust, Oxford, England.

34. Ilter, B. G. (2009) *Effect of technology on motivation in EFL classrooms.* Turkish Online Journal of Distance Education - TOJDE October 2009. ISSN 1302-6488. Vol.10; No. 4, Article 9.

35. Ilter, G. (2009) *Effect of Technology on Motivation in EFL Classrooms.* Turkish Online Journal of Distance Education - TOJDE October 2009. ISSN B02-6488. Vol.10, No.4, Art. 9; pp. 136-155.

36. Jiang, Z. (2008) *Developing CALL to Meet the Needs of Language Teaching and Learning.* CCSE English Language Teaching, Vol. 1. No.2; https://www.ccsenet.org/journal/; pp. 108-111.

37. Kahn, R. (Jan. 1972.) *Communications Principles for Operating Systems*. Internal BBN memorandum.

38. Kang, S. & Dennis, J. R. (1995) *The effects of computer-enhanced vocabulary lessons on achievement of ESL grade school children.* Computers in the Schools; pp. 25-35.

39. Keis O, Grab C, Schneider A, Ochsner W. *Online or face-to-face instruction? A qualitative study on the electrocardiogram course at the University of Ulm to examine why students choose a particular format.* BMC Med Educ. 2017;17(1):194. doi:10.1186/s12909-017-1053-6.

40. Kejawa, I. D. (2016) *Computer in Society: The World of Science and Technology.* Red Read Press, Pittsburg, PA; pp. 8-27.

41. King, L. (2003) *Improving the quality of language learning in schools: approaches to teaching and learning;* London: CILT.

42. Kleinrock, L.(July 1961) *Information Flow in Large Communication Nets,* RLE Quarterly Progress Report.

43. Kling, Rob & Walt Scacchi (1982) *The Web of Computing: Computing Technology as Social Organization.* Advances in Computers 21; pp. 3-85.

44. Kuss, D. & Griffiths, M. (2012) *Internet Gaming Addiction: A Systematic Review of Empirical Research.* International Journal of Mental Health and Addiction, Vol. 10/2; pp. 278-296.

45. Kühn, S. et al. (2011) The neural basis of video gaming. Translational Psychiatry, Vol. 1/11; pp. e53.

46. Leech, G. & Candlin, C. N. (eds.) (1986) *Computers in English Language Teaching and Research.* London: Longman.

47. Lengyel, V. (1998) *Az Internet világa.* ComputerBooks Kiadó, Budapest; pp. 3-16.

48. Levy, M. (1997) *Computer-assisted language learning: Context and conceptualization.* New York: Oxford University Press; p.298.

49. Lim, C. D. & Yu, G. L. (2001) *Creativity and Innovation Education.* BeiJing: HuaYi Press.

50. Liu, Y. (2000) *The effects of nonverbal cues on impression formation in computer-mediated communication: An exploratory study.* Dissertation Abstracts International, 61(4).

51. Lueddeke, G. R. (2003) *Professionalizing teaching practice in higher education: a study of disciplinary variation and 'teaching scholarship'.* Stud.HigherEduc. 28, pp. 213-228.

52. Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*, U.S. Department of Education, 1–94. [2020.10.15]

53. OECD (2020) *A Framework to Guide An Education Response to te COVID-19 Pandemic of 2020* [EB/OL].

54. Oliveira, M. M. S.; Penedo, A. S. T.; Pereira, V. S. *Distance education: advantages and disadvantages of the point of view of education and society.* Dialogia, São Paulo, n. 29, p. 139-152, 2018.https://doi.org/10.5585/Dialogia.n29.7661

55. Pellegrini, M., Ponzo, V., Rosato, R. et al. (2020) *Changes in weight and nutritional habits in adults with obesity during the 'lockdown' period caused by the COVID-19 virus emergency.* Nutrients 12: 2016.

56. Pennington, M. C. (1996) *The Power of CALL*. Houston: Athelstan.

57. Przybylski, A. & Weinstein, N. (2017) *A Large-Scale Test of the Goldilocks Hypothesis.* Psychological Science, Vol. 28/2; pp. 204-215.

58. Quitney, J. A. (2003) *The future impact of the Internet on higher education: Experts expect more efficient collaborative environments and new grading schemes; they worry about massive online courses, the shift away from on-campus life;* Pew Research Center's Internet & American Life Project; pp. 1-43.

59. Rubin, J. & Wenden, A. (1987) *Learner Strategies in Language Learning.* New Jersey: Prentice Hall.

60. Rubin, J. (1975) *What the "Good Language Learner" Can Teach Us;* TESOL Quarterly, Vol. 9. No.1. pp. 41-51.

61. Saris, W. E. and Gallhofer, I. N. (2014). *Design, evaluation, and analysis of questionnaires for survey research.* Second Edition. Hoboken, Wiley.

62. Teeler, D. & Grey, P. (2000) *How to use the internet in ELT.* Longman. ISBN 0582-339316; pp. 1-130.

63. Thanji M, Vasantha S. *ICT factors influencing consumer adoption of ecommerce offerings for education.* Indian J Sci Tech. 2016;9(32):1–6.

64. Thomson, L. D. (2010). *Beyond the Classroom Walls: Teachers' and Students' Perspectives on How Online Learning Can Meet the Needs of Gifted Students.* Journal of Advanced Academics, 21(4), 662-712.

65. Virtič, M. P., Dolenc, K., and Šorgo, A. (2021). *Changes in online distance learning behaviour of university students during the coronavirus disease 2019 outbreak, and development of the model of forced distance online learning preferences.*

66. Warschauer, M. & Healey, D. (1998) *Computers and language learning: An overview.* Language Teaching, 31; pp. 57-71.

67. Warschauer, M. (1996) *Computer-assisted language learning: An introduction.* In. S. Fotos. (Ed.), Multimedia Language Teaching; Tokyo: Logos International; pp. 3-20.

68. Weinstein, A. & Lejoyeux, M. (2015) *New developments on the neurobiological and pharmacogenetic mechanisms underlying internet and video game addiction.* American Journal on Addictions.

69. William, M. & R. L. Burden (1997) *Psychology for Language Teachers: A Social Constructivist Approach*; Cambridge:CUP.

70. Yu, H., Liu, P., Huang, X. & Cao, Y. (2021) *Teacher Online Informal Learning as a Means to Innovative Teaching During Home Quarantine in the COVID-19 Pandemic.* Front. Psychol. 12:596582. doi:10.3389/fpsyg.2021.596582.

71. Zakari, I. (2019) *History of computer and its generation.* Bsc. COmputer Science Department of Mathematics and Computer; pp. 2-6.

РЕЗЮМЕ

Нещодавно комп'ютери стали важливим інструментом, особливо у сфері зберігання даних і у поширенні інформації. Видатний технічний результат сучасного періоду- поява нової інфраструктури, що революціонізувала особисту комунікацію, освіту, виробництво, і майже кожну сферу соціального життя. Сьогодні, напрям розвитку, який з'єднує багато мільйонів робочих міст у віддалених куточках світу основується на швидкісній мережі, отже створюючи нові якісні послуги, можна подолати час, географічні обмеження і різні межі. Сучасна освіта вийшла на зовсім другий рівень у результаті онлайн навчання, який став необхідним компонентом освіти під час пандемії COVID-19, яка триває в Україні до сьогоднішнього дня.

У першій частині обговорювалися теоретичні концепції повязані з вивченням мови за допомогою комп'ютера, процеси та стратегії вивчення мови, важливість Інтернету, а також розвиток CALL (Computer-Assisted Language Learning, який переводится як вивченням мови за допомогою комп'ютера) у класах.Протягом останніх двох десятиліть відбувся помітний рух у сфері вивчення мови та викладання, з більшим акцентом на учнів і на навчання, а не на вчителів та викладання. CALL визначається як пошук і вивчення застосувань комп'ютера у викладанні та вивченні мови. Завдяки швидкому розвитку інформаційних технологій комп'ютери зараз широко використовуються в різних сферах, включаючи викладання та вивчення мови.

У другій частині були розглянуті теоретичні концепції класів EFL(English as a Foreign Language- англійська як іноземна мова), ефекти технології та використання ІКТ-пристроїв (Інформаційно-комунікаційні технології). Протягом багатьох років багато змінних впливали на підходи, методи та стратегії вивчення іноземних мов. Вивчення іноземної мови є складним завданням, і студентам у цей час потрібна постійна підтримка та натхнення. Технологія може бути однією з тих речей, які мають корисний вплив щодо ставлення студентів під час викладання/навчання. Було виявлено, що використання навчальних технологій, зокрема ІКТ, у класі англійської мови покращує та оптимізує процес оволодіння мови, а також значно мотивує їх продовжувати навчання та стимулює їхню творчість та пристрасть. Діти у двадцять першому столітті мають більше навичок у володінні технікою, ніж попередні покоління. Через це збільшення у використанні, багато уваги приділялося впливу технологій на мозок дітей та їх соціально-емоційний, когнітивний та фізичний

розвиток. ІКТ можна використовувати різними способами, щоб допомогти учням і вчителям дізнати більше про їхні предметні галузі. Навчальні фільми, стимуляція, зберігання даних, використання бази даних, складання ментальних карт, керовані відкриття, мозковий штурм, музика та всесвітня павутина (www) — це лише деякі із способів, якими технологічне викладання та навчання може забезпечити та зробити навчальний досвід більш корисним і актуальним.

Третя частина містить детальне пояснення мети дослідження та його результатів. Мета дослідження - оцінити ставлення та думку учнів старших класів та студентів вищих навчальних закладів щодо онлайн-освіти, яка виникла через війну та попередню пандемію COVID-19. Анкета складалася з двадцяти шести запитань. Цільова вікова група варіювалася від учнів 8 класу середньої школи до студентів останнього року навчання в університеті. Ця вікова група вже має певну думку та досвід щодо комп'ютерного вивчення мови в онлайн-освіті.

Анкета - це тип дослідницького інструменту, який складається з набору запитань, спрямованих на збір релевантних даних від учасників. Анкета, використана в цій роботі, складається з відкритих і закритих запитань. Було зібрано дані сімдесяти двох респондентів з різних населених пунктів Закарпаття. Анкета була написана двома мовами - англійською та угорською.

У першому питанні групи були розділені, тут респонденти обирали, до якої вікової групи вони належать. Дослідження починалося з 8-го класу середньої школи і закінчувалося студентами останнього курсу університету. 25% респондентів навчаються у 8 класі, 15% - у 9 класі, 15% - у 10 класі, 25% - в 11 класі і 30% - студенти вищих навчальних закладів. Серед респондентів - мешканці Мала Доброні, Великої Доброні, Чомонін, Великі Геївців, Берегове та Мукачево.

Питання стосувалися онлайн-освіти, чи є онлайн-освіта за допомогою технологічних інструментів більш бажаною, ніж традиційна освіта в класі. 13% учасників надають перевагу онлайн-навчанню за допомогою комп'ютерів та інших допоміжних засобів. 46% студентів надають перевагу офлайн-навчанню в класі без будь-яких технологічних пристроїв. 41% студентів вважають, що надають перевагу обом варіантам однаково. 64% респондентів використовують свої електронні пристрої для спілкування та підтримки стосунків з родиною та друзями, 56% - для розваг та відпочинку. 49% з них використовують його щодня для навчання та вирішення

завдань, а 46% - для перегляду навчальних відео на Youtube та інших фільмів, кінофільмів та короткометражок. 26% учасників переважно грають на своїх електронних пристроях в ігри, а 11% використовують їх для роботи, яку вони виконують вдома або віддалено.

З отриманих даних можна зробити висновок, що найбільш використовуваними веб-сайтами та програмами серед студентів є не веб-сайти, які розвивають знання, а сайти та додатки соціальних мереж. Окрім веб-сайтів та програм, учасники також обрали додатки, які вони найбільше використовують для навчання. 79% учасників використовують Google Classroom та Meet, 36% - Kahoot! і 34% - Zoom. Це додатки, якими користується більшість учасників. Крім того, 31% використовують Zanza TV, 18% - Redmenta, 13% - Sulinet Bázis, 10% - Okos Doboz і 19% - DuoLing. Лише 5% використовують ClassIn.

Таким чином, у дисертації детально представлено позитивні та негативні сторони комп'ютерного вивчення мови та ставлення закарпатських студентів до цього питання. Студенти загалом позитивно ставляться до онлайн-освіти та технологічного прогресу. Остаточне рішення про те, чи підходить комп'ютерне навчання для конкретного класу, залишається за кожним окремим викладачем. Використання комп'ютерів на заняттях може бути чудовим способом скористатися перевагами нових технологій та покращити процес вивчення мови, якщо переваги та недоліки належним чином збалансовані.

⊍ UNICHECK

Назва документа: Berta_CALLdevelopmentinEFLclassrooms.3

Кількість сторінок: 57   Кількість слів: 16027   Кількість символів: 104825   Розмір файлу: 297.72 KB   ID файлу: 1014832

7.39%
Схожість

Найбільша схожість: **1.54%** з Інтернет-джерелом (http://r4.yahsoapis.com/_ylt=K3cOMTvhuzkwOW1nBF9TA2IwMjMvNT...

7.31% Джерела з Інтернету	**364**	.... Сторінка 59
0.19% Джерела з Бібліотеки	**3**	.... Сторінка 66

16% Цитат

Цитати	**81**	.... Сторінка 66
Посилання	**1**	.... Сторінка 70

1.46%
Вилучень

Деякі джерела вилучено автоматично (фільтри вилучення: кількість знайдення слів є меншою за 8 слів та 0%)

1.46% Вилучення з Інтернету	**55**	.... Сторінка 71
1.42% Вилученого тексту з Бібліотеки	**32**	.... Сторінка 71

Модифікації

Виявлено модифікації тексту. Детальна інформація доступна в онлайн-звіті

Замінені символи	**2**